

Borough



Swindon

OF

ANNUAL REPORT

OF THE

Medical Officer of Health

FOR THE YEAR 1937

AND THE

Isolation Hospital Annual Report

From the 1st April, 1937, to the 31st March, 1938.

By **DUNSTAN BREWER, M.R.C.S., L.R.C.P., D.P.H.**

**Report of the
Chief Sanitary Inspector**

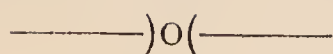
FOR THE YEAR 1937.

**Annual Report
of the School Medical Officer**

FOR THE YEAR 1937.



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BOROUGH OF SWINDON.

Health Committee.

Chairman—Alderman S. E. WALTERS

Vice-Chairman—Councillor Mrs. S. ANDREWS

Members.

THE MAYOR (Alderman Major H. E. N. NIBLETT, O.B.E., D.C.M., J.P.)

Alderman F. E. ALLEN	Councillor G. H. HUNT
„ W. SEATON	„ F. E. AKERS
„ A. SNOW	„ H. W. GARDNER
„ T. MANNING	„ G. H. SELMAN
„ L. J. NEWMAN	„ Mrs. E. M. SIMPKINS
„ A. H. WHEELER	„ A. E. HARDING
Councillor Mrs. E. CARTER	„ MRS. M. GEORGE
„ M. ASHBY	

Maternity and Child Welfare Sub-Committee.

Chairman—Councillor Mrs. S. ANDREWS.

Members.

Alderman F. E. ALLEN	Councillor Mrs. E. M. SIMPKINS
„ A. SNOW	„ A. E. HARDING
„ T. MANNING	„ Mrs. M. GEORGE
„ L. J. NEWMAN	Miss K. J. STEPHENSON
„ S. E. WALTERS	Miss D. P. CHAPPELL
„ A. H. WHEELER	Mrs. DRAPER
Councillor Mrs. E. CARTER	Mrs. SCHMITZ
„ M. ASHBY	Miss I. F. MOORE
„ G. H. HUNT	Mrs. E. K. RUDDLE
„ F. E. AKERS	Mrs. L. E. FRY
„ H. W. GARDNER	Mrs. F. MORRIS
„ G. H. SELMAN	

Town Clerk—W. H. BENTLEY, Esq.

BOROUGH OF SWINDON.
PUBLIC HEALTH DEPARTMENT.

STAFF.

Medical Officer of Health, School Medical Officer and Medical Superintendent of the Isolation Hospital and Maternity Home.

DUNSTAN BREWER, M.R.C.S., L.R.C.P., D.P.H.

Deputy Medical Officer of Health.

D. S. CLARK, M.B., Ch.B., D.P.H., D.P.M., (commenced duties 15-8-37)
 V. R. WALKER, B.Sc. M.B., Ch.B., D.P.H. (resigned 7-6-37)

Assistant Medical Officer of Health.

VIOLET REDMAN KING, M.B., Ch.B.

Chief Sanitary Inspector.

F. H. BEAVIS.

Certificate of the Royal Sanitary Institute.

Certificate of the Royal Sanitary Institute for Meat Inspection.

Certificate in Building Construction.

Assistant Sanitary Inspectors.

H. A. BANWELL.

Certificate of the Royal Sanitary Institute.

Certificate of the Royal Sanitary Institute for Meat Inspection.

Certificate of the Worshipful Company of Plumbers and Final
 Certificate City and Guilds.

Certificate in Hygiene.

F. R. G. SELWOOD.

Certificate of the Royal Sanitary Institute.

Certificate of the Royal Sanitary Institute for Meat Inspection.

D. L. WILKINSON (commenced duties 18-10-37).

Certificate of the Royal Sanitary Institute and Sanitary Inspectors
 Examination Joint Board.

Certificate of the Royal Sanitary Institute for Meat Inspection.

Certificate in Building Construction.

R. N. HUGHES (resigned 18-5-37).

Certificate of the Royal Sanitary Institute and Sanitary Inspectors
 Examination Joint Board.

Certificate of the Royal Sanitary Institute for Meat Inspection.

Liverpool University Certificate in Meat and Food Inspection.

Liverpool University Certificate in Sanitary Science.

*Temporary Assistant Sanitary Inspector, appointed to carry out
 1935 Housing Act.*

H. MITCHELL.

Certificate of the Royal Sanitary Institute and Sanitary
 Inspectors' Examination Joint Board.

Head Clerk—S. MANSFIELD DEE.

Senior Clerk Public Health Service—W. M. WATTS.

Senior Clerk School Medical Service—J. W. DAY.

Assistant Clerks—

W. H. PAUL.

A. M. R. JONES.

D. A. OWEN.

Clinical Clerks—

Miss G. L. NORRIS.

Miss E. M. KEY.

PUBLIC HEALTH DEPARTMENT.

STAFF—*Continued.*

Matron of the Isolation Hospital.
Miss J. McKINNON SMITH, A.R.R.C.

Matron of the Maternity Home and Training Centre.
Miss Q. M. ANSTICE.

Health Visitors and School Nurses.

Miss I. D. SAMPSON.

3 years Certificate of Hospital Training.
Certificate for Tuberculosis (Royal Chest Hospital, London).
Queen's Nurse.
Certificate of the Central Midwives Board.
State Registered Nurse.

Miss E. M. PILCHER.

3 years Certificate of Hospital Training.
School Nurse's and Health Visitor's and Tuberculosis Certificate.
Certificate of the Royal Sanitary Institute.
State Registered Nurse.

Miss A. HAWKINS.

4 years Certificate of Hospital Training.
Certificate of the Central Midwives Board.
Health Visitor's Certificate of the Royal Sanitary Institute.
State Registered Nurse.

Miss O. MARKER

4 years Certificate of Hospital Training.
Certificate of the Central Midwives Board.
Health Visitor's Certificate of the Royal Sanitary Institute.
State Registered Nurse.

Mrs. K. M. D. FRANCIS.

3 years Certificate of Hospital Training.
Certificate of the Central Midwives Board.
Health Visitor's Certificate of the Royal Sanitary Institute.
State Registered Nurse.

Miss C. E. MIDDLETON.

4 years Certificate of Hospital Training.
Certificate of the Central Midwives Board.
Health Visitor's Certificate of the Royal Sanitary Institute.
State Registered Nurse.

Domiciliary Midwifery Service.

Miss O. M. TREDELL (Extern Dept. Maternity Home).
Mrs. I. GALE.
Mrs. A. V. INGRAM.
Mrs. H. M. M. MORTIMORE.
Miss W. I. SHEPPARD.

Needlework Demonstrator—Miss M. JOBSON.

Disinfector—A. C. MOLE.

Rat Catcher—S. F. WAKEFIELD.

Voluntary Helpers at Maternity Centres.—

Mrs. E. SCHMITZ

Mrs. CHAPMAN

Mrs. OSMOND

Mrs. SANDILANDS

LIST OF CONSULTANT & SPECIALIST STAFF.

MATERNITY DEPARTMENT.

Obstetricians on the Rota :

J. HOLLAND, M.B., B.Ch., B.A.O.R.U.I.

S. McDERMOTT, M.B., B.Ch.

M. BEHR, M.R.C.S., L.R.C.P. (Lond.).

W. HYND, M.B., Ch.B.

Honorary Consulting Physician :

(VACANT).

Consulting Surgeon :

J. EWART SCHOFIELD, F.R.C.S. (Eng.), M.B., Ch.B.

Consulting Obstetrician :

A. W. BENNETT, M.R.C.S. (Eng.), L.R.C.P. (Lond.)

Ophthalmic Surgeon :

OLIVER B. PRATT, M.A., M.B., B.Ch., D.O. (Oxon), M.R.C.S.
L.R.C.P.

Surgeon for Nose, Throat and Ear Diseases :

F. COURTENAY MASON, B.A. (Lond.), M.S., M.B., B.S., F.R.C.S.
(Eng.)

Orthopaedic Surgeon :

M. F. FORRESTER BROWN, M.D. (Lond.) M.S.

Cardiologist :

C. E. K. HERAPATH, M.D. (Lond.), M.B., B.S., M.R.C.S., L.R.C.P.
(Lond.)

Honorary Consultant for Nervous and Mental Diseases :

J. F. W. LEECH, M.D., M.B., B.Ch., B.A.O., D.P.M., R.C.P.S.I.

To the Chairman and Members of the Health etc., Committee.

LADIES AND GENTLEMEN,

I beg to submit the annual report on the health conditions of the town during the year 1937.

STAFF OF THE PUBLIC HEALTH DEPARTMENT.

Dr. V. R. Walker resigned his post of deputy medical officer of health on appointment as medical officer of health of Lowestoft. He left the service on 7-6-37, and Dr. D. S. Clark, who was appointed in his place, commenced duties on 15-8-37.

GENERAL PUBLIC HEALTH AND SANITATION OF THE TOWN.

In accordance with the requirements of the Ministry of Health, the annual report for 1937 is an ordinary and not a survey report and, with certain exceptions, information and observations are only required on alterations, improvements, or developments which have taken place during the year. It is not therefore necessary to say much about the general sanitation of the town, for in this there was no important alteration, nor development, nor any troubles calling for remembrance. But in view of the public interest aroused by the Inquiry at Croydon, it would be as well to say something about the general administration of the public health services and the local machinery for assuring cohesion between the various officers responsible to the Corporation for the discharge of its health functions.

The medical officer of health is concerned with everything in the town, or which may happen in the town, which has, or may have, an influence on the health of the citizens. It is his business to find out all adverse, or possible adverse, circumstances and to explore what influence they might have upon human health. He must be a busy-body in thought, but need not be in action and it is not necessary for him to interfere with the work of other officers. The sanitary inspectors are directly under the medical officer of health and though it is neither necessary nor desirable for him to meddle with their routine functions, it is essential that he should know what they are doing and to hear from them anything they discover which has bearings upon health.

In a small town the borough surveyor has to cover a multitude of functions almost as extensive as those of the medical officer of health, most of which, but not all, are part of the health department. These include sewerage, disposal of sewage, collection and disposal of refuse, street cleansing, parks and open spaces, and above all, water. In all these the medical officer of

health is interested and he relies upon the borough surveyor for information of any events connected with any of them which might have a special health bearing. That which interests both officers most and which gives most anxiety is water, as it is essential in the public interest that both borough surveyor and medical officer of health should be acquainted with everything connected with the public water supply. The medical officer need not interfere with what may be called the mechanical side of water supply, but he must know the state of chemical and organic purity of the waters and be kept informed of any matters which might be expected to influence either the quantity, or quality of the water. The usual arrangement, that which obtains in Swindon and that which almost guarantees freedom from serious trouble, is that the borough surveyor, as water engineer, looks after the source of supply and its distribution, whilst the medical officer keeps watch on the water as delivered to the consumer. In pursuance of this policy the medical officer is free to take samples of water from any domestic tap as frequently as he considers desirable and to have them analysed in any manner that he considers suitable for his purpose. Should either officer encounter anything in his part of the business which is of interest to the other, they consult together and anything requiring attention is explored and put right. Minor troubles of the water supply are frequent, but in Swindon it is a long time since we have had any trouble of importance. In the few cases in 1937 when a water sample was below our standard, the sources of the troubles were discovered and suppressed. There was none which had any danger to health.

Another matter which came into prominence during the Croydon Inquiry was the working arrangement between the official health department and the private practitioners of medicine. This is a subject which is vital in the public interest and though complete agreement has not yet been reached, enormous progress has been made in this direction during the past few years. Prior to the Inquiry, inaccurate statements regarding present practice were made by persons unfamiliar with modern health administration, which further complicated an exceedingly difficult matter. The relationship between the medical officer of health and his professional colleagues is different in a small area from what it is in a large one, for in the former he can be expected to know all his fellow practitioners personally and generally has full opportunity to discuss matters with them. In theory there is supposed to be a lot of friction between public and private medical practitioners, but I have seen little of it in my experience and have been fortunate in working amicably with my professional colleagues and receiving from them everything that I desire for safeguarding the health of the town. Since the medical officer of health is dependent upon private practitioners for knowing the topical and local incidence of disease in his area, it is quite impossible for him

to practice epidemiology without their assistance. The private practitioners have certain grievances against the development of public medicine, for this has unquestionably altered private medical practice very considerably. We who practice public medicine maintain that the changes, on the whole, have been to the advantage of the private practitioners, but we are not surprised if they do not always see matters in the same light. Medical practitioners will naturally and justly resent any interference with their private business by the health department, which is not essential in the public interest. Misunderstanding can come about from asking the practitioners for information which can be obtained from other sources without bothering them, or from the converse, of trying to get information from other sources which should be given only by practitioners in medicine. These causes of friction are not difficult to avoid. Locally, we have a very healthy branch of the British Medical Association, which has been extremely useful in forming a bond between the doctors of the health department and those in private practice. In Swindon about half the population receives medical attention from the G.W.R. Medical Fund Society and the other half is served by two big medical firms and a few other practitioners working singly. Every practitioner in the town is known to the others and the general atmosphere is one of friendliness.

HOUSING.

During the year 515 new houses were erected in the Borough, 3 by the local authority and 512 by private enterprise. No houses were demolished.

The chief matter in housing in 1937 was the accommodation of families found overcrowded on the survey. This was a much smaller business than was anticipated and we were able to make good progress in it. The details of what was done appear in the report of the chief sanitary inspector.

NUTRITION AND THE INSPECTION AND CONTROL OF FOODSTUFFS.

There is nothing new to report under this section.

LABORATORY FACILITIES, HOME NURSING, CLINICS AND TREATMENT CENTRES AND AMBULANCE FACILITIES.

No change of any importance occurred in any of these during 1937.

SANITARY CIRCUMSTANCES OF THE AREA.

Matters connected with closet conversion, shops, swimming baths and pools are referred to in the report of the Chief Sanitary Inspector.

Eradication of bed bugs.

15 council houses and 90 other houses were found infested with bed bugs and all were disinfested. The method used at present is Lawes' disinfectator blocks, which have proved satisfactory. This work is carried out by the local authority. The tenants for council houses are selected and an inspection of the houses they leave and of their belongings is carried out by the sanitary inspectors prior to their admission to council houses, but there is no method in use to *ensure* that the tenants do not carry bugs on their persons, or in their belongings. Bed bugs are not such a formidable menace in Swindon as they are in some of the older towns. It will be seen from the small number of houses that we have found to be infested that locally our problem is not great, so up to the present no particular action has been taken to call public attention to it. This matter will, however, receive attention in the near future, for the fact that the bed bug is not particularly frequent in the borough offers the possibility for its complete extermination.

BACTERIOLOGICAL INVESTIGATIONS.

These were more numerous in 1937 than in any previous year, owing to the investigations into dysentery and attempts to find out the dominating types of streptococcus. The work of the former was done at Bristol University and of the latter at the Ministry of Health, through Bristol University. A large amount of bacteriology of a somewhat rough kind is done directly by the public health department. Details of this are not tabulated, for it is in the ordinary run of clinical medicine and practical epidemiology. I feel, however, that the future should see an extension of bacteriological investigations in connection with epidemiology. For the full understanding of the movements of disease in populations, knowledge of the various parasites and of their types and mutations is essential. The sort of work required can be done only in a fully equipped laboratory with facilities for biological experiments. So far as Swindon is concerned, Bristol University serves our purpose well, though for certain special forms of investigation other centres must be utilized. Thus, Edinburgh University has the best equipment for the special pregnancy tests, Liverpool University for typing certain species of organisms and the Ministry of Health itself alone has the material for typing the streptococcus. It is exceedingly disappointing to find how little advanced biological methods are used in clinical medicine, not because the practitioners do not recognise their value, but because of the difficulty they have in getting their material properly handled. This is a matter which should receive consideration and I imagine that it should be one of the functions of the local health department to accept from practitioners in the district any pathological material which they wish to be investigated and for the health department to dispose of this material at those centres of research which are qualified to undertake it.

THE HOSPITAL SITUATION IN SWINDON.

Some progress was made in the amalgamation of the two general hospitals in the town, or rather for the one hospital to take over the functions of the other, which is an obsolete building. What will come of these negotiations cannot yet be foretold, but whatever may be the ultimate hospital policy of Swindon, the first step in the process is this amalgamation. At one time I visualized a complete hospital policy for the town, so that the various institutions available should each pull its own weight and not pull against each other. I had hoped to see this realised, but I know now that it cannot come in my time. However, I have some faint hopes of living to see the first step in the process completed, which is the extension of Victoria Hospital to absorb the Great Western Medical Fund Hospital, apart from its accident ward.

NEW LEGISLATION DURING 1937.

The Midwives Act 1936 came into operation on the 1st August, 1937. Four of the midwives who had been acting in a private capacity in the town for some years were appointed as municipal midwives and to these was added the sister in the extern department of the Maternity Home. Four midwives surrendered their certificates.

On the 1st January, 1938, the midwives who gave notice of intention to practise in the town were— 8 connected with the Maternity Home, 4 domiciliary midwives employed by the corporation, 1 in a private nursing home, 1 in the Isolation Hospital and 6 in private practice, of which one is resident outside the borough, one works mainly as a maternity nurse and the other four do an occasional case from time to time. I should imagine that before very long all the midwifery in the town will be done from the Maternity Home, or by the municipal midwives and that the final arrangement will be a midwifery service controlled entirely from the Maternity Home. I can see in this a system admirably suited to the citizens and to the medical practitioners in the town.

The 1936 Public Health Act came into operation in October, 1937. This Act is the first part of a general codification of the health laws. In spite of its very numerous faults, this codification will be a great relief to the coming generation of health officers, for it is somewhat less confusing than the multitude of statutes which it replaces. But the Ministry of Health cannot expect the older generation to be enthusiastic about it, because besides codification it introduces certain differences of procedure. Whilst admitting that these are general improvements, old dogs cannot learn new tricks and those of us who have been carrying out the old Public Health Acts for a long time find the changes in procedure somewhat confusing. The best thing in the new Act is the repeal of the Isolation Hospital Acts, which had always been a nuisance.

Maternity and Child Welfare.

ANNUAL STATISTICS RELATING TO THE MATERNITY HOME, 1937.

	Borough.	County.	Total.
(1) Number of cases in the Home on 1st January, 1937.	12	3	15
(2) Number of cases admitted during 1937	360	106	466
(3) Number of cases remaining in the Home on 1st January, 1938	8	4	12
(4) Average duration of stay	13 days	17 days	14 days
(5) No. of cases delivered by :—			
(a) Midwives	275	76	351
(b) Doctors	47	15	62
No. of cases in which no delivery took place	50	18	68
(6) No. of cases in which medical assistance was sought by the midwives		154	
(7) No. of cases notified as Puerperal Pyrexia		*38	
(8) No. of cases of pemphigus neonatorum		None	
(9) No. of cases notified as ophthalmia neonatorum with result of treatment in each case		None	
(10) No. of infants not entirely breast-fed while in the Institution		35	
(11) No. of maternal deaths, with causes	6.	One post-partum hæmorrhage Three eclampsia One accidental hæmorrhage and One broncho-pneumonia	
(12) No. of foetal deaths :—			
Abortion	4		
Stillbirths	21		
Infants deaths	8		

* This is the number notifiable under the New South Wales Convention which is in use at the Maternity Home. The number notifiable under the Puerperal Pyrexia Order was 13. One case was removed to the Isolation Hospital; one was transferred to a general hospital and one died in the Maternity Home.

In view of the great importance of reducing the ante-natal mortality, the only element in child mortality which so far has resisted our efforts to control it, and also to help to explain the extraordinary reproductive history of Swindon in 1937, great attention was paid to the reproductive failures and in every case so far as it was possible to do so, an attempt was made to attribute the failure to its probable cause.

Legally and socially distinctions are drawn between abortions, stillbirths and live births. These distinctions have no biological foundation. For instance, there is no biological distinction between a monster which is born dead and one that survives for a few minutes, nor between infants damaged in delivery who die before or after they have passed the maternal passage. On the other hand, there is the widest biological distinction between a malformed foetus, one that is killed by obstetric difficulties and one that dies either before or after birth as the result of metabolic failure of its mother. It is therefore neither proper, nor useful in preventive medicine to make a distinction between stillbirth and live birth. In what follows they are considered together.

Altogether out of 413 deliveries we had 33 reproductive failures. Four were abortions. Of these, one was probably induced, one was a natural abortion, that is, the embryo had died and become macerated and was extruded from the mother, who was the subject of rheumatic disease. Two were pathological abortions, that is, living embryos extruded by the mother owing to disease in herself. One of these mothers was an eclamptic who died and the other was suffering from influenza.

Of the stillbirths and early infant deaths.

- 7 were anencephalic monsters.
- 2 others were foetal deformities.
- 7 were born of mothers suffering from pregnancy disease.
- 1 was born of a mother suffering from toxic goitre; who eventually died of that disease.
- 1 died from cerebral injury during delivery.
- 1 was apparently killed in utero from accidental separation of the placenta.
- 5 died from asphyxia caused by difficult delivery.
- 1 who survived 21 days, died of post-natal pneumococcal infection.
- 4 all premature, died from no assignable cause.

This is a very remarkable list, the two most striking features being the number of cases of anencephaly and the number of infant deaths caused by pregnancy disease in the mother,

The secular distribution of the anencephalies, namely, one in March, two in May, one in July, one in September, one in October and one in November, shows no correspondence with the historical sequence of the unfavourable elements of 1937 and we may therefore tentatively assume that the causes of this high rate of anencephaly were not the same as the causes of the other troubles. The secular distribution of the infant deaths secondary to pregnancy disease does show a correspondence with the secular distribution of pregnancy disease, in that four out of seven occurred between the 18th July and the end of August, but this, of course, is merely what is to be expected.

It has been said that the reproductive history of Swindon in 1937 was unusually unfavourable and a review of the history shows that there were three adverse elements which occurred in sequence. Up to the end of June there was nothing exceptional. In the fortnight preceding "Trip" there were nine cases of abortion known to us which had gone wrong and, as it is only a small proportion of abortions that do go wrong and consequently come under medical observation, it is just to presume that the actual number of abortions that did occur was many times that which is known to us. At any given time there are about 600 women pregnant in the borough so the abortion rate amongst them in the fortnight preceding "Trip" must have been very high. Immediately after "Trip" we had a truly alarming number of cases of pregnancy disease, albuminurias, eclampsias and ante-partum haemorrhages. The extent of this trouble can be gauged by the table in Appendix One on the admissions to the Maternity Home in four months—May to September, 1937. This may be contrasted with a table of cases admitted between 1-7-33 and 30-9-33, which was a normal period. This period of high frequency pregnancy disease ended in August and was followed by a pronounced drop in the birth rate, which is apparent from the Table in Appendix I.

This unfavourable reproductive history caused very great anxiety and extensive investigations were made to try to elucidate its causes. The result is sinister and cannot be revealed until further exploration confirms the reliability of the evidence and the validity of the deductions from it.

Of the 413 cases delivered in the Maternity Home, 34 were delivered by forceps, giving a forceps rate of 8.1%, which is the lowest in the history of the Home. Among the forceps cases there were 21 ruptured perineum, giving a rate of 61.7%. Among cases not instrumentally delivered there were 80 with ruptured perineum, giving a rate of 21.1%. There were three Caesarian sections and 18 inductions.

Of pregnancy disease, 24 albuminurias and 15 ante-partum haemorrhages were admitted into the Home.

EXTERN MIDWIFERY DEPARTMENT.

On the district there were 144 cases—105 midwives cases, 11 doctors cases, 17 born before arrival of midwives and 11 abortions.

During the year 24 probationers were under instruction. Of these 10 obtained the Certificate of the Central Midwives Board.

MATERNITY CLINIC.

(Report by Dr. V. REDMAN KING, Asst. Medical Officer of Health.)

A larger number of women visited the Centre in 1937, though the number of attendances they made was fewer.

The number of clinics has been increased. The following is the revised table of the days and times of the Maternity Clinic at 37 Milton Road, Swindon :—

Monday afternoon 2 o'clock.	G.W.R. Medical Fund Doctor in attendance.
Monday evening 6 o'clock.	Matron's booking clinic.
Tuesday afternoon 2 o'clock.	Asst. Medical Officer of Health in attendance.
Tuesday evening 6 o'clock.	Matron's clinic.
Thursday afternoon 2 o'clock	G.W.R. Medical Fund Doctor in attendance.
Friday afternoon 2 o'clock.	Matron's clinic.

16 mothers were admitted to the Maternity Home from the ante-natal clinics : nine for signs and symptoms of toxæmia, of whom seven were primigravidae ; inductions were performed in three of these cases. One was admitted for heart disease, one for pyelitis, one for disproportion on whom induction was performed, and four for version. The only stillbirth of these was one of the last-named where version was unsuccessful, and the child delivered as an extended breech.

There were 31 cases of albuminuria, ten occurred in primigravidae. Five mothers were admitted to the Maternity Home for observation. In 19 mothers it occurred once, in 8 twice, in 2 three times and in 2 four times. One mother aborted, one was delivered of twins. There were five inductions with one stillbirth. One case was delivered by forceps and one mother died with eclampsia, undelivered. There were two other maternal deaths.

The number of stillbirths was the same as for the previous year, but the neo-natal deaths were only five, against a previous 9.

STATISTICS RELATING TO THE MATERNITY CLINIC, 1937.

No of mothers attending the Centre for all purposes	....	686
„ attendances at all clinics	....	2346
„ „ at Consultant's clinics	....	150
TOTAL ATTENDANCES AT ALL CLINICS	....	2496
Primigravidae	....	230
No. referred to Consultant's Clinic	....	49
No. referred to Dental Clinic	....	44
Specimens of urine tested	....	2243
Gynaecological and post-natal cases	....	11
Cases of suspected pregnancy	....	9
Ascheim-Zondek tests	....	11
Admitted to Maternity Home from Ante-natal Clinic	....	16
Cases X-rayed	....	8
Wassermann test	....	1
No. of cases carried over into 1938	....	138

Conditions found at Clinics :—

Albuminuria	....	31
Enlarged thyroid	....	4
Varicose veins	....	98
Anaemia	....	3
Ranula	....	1
Fibroid	....	1
Scoliosis	....	2
Pyelitis	....	2
Pruritus	....	1
Fits	....	1
Epistaxis	....	1
Rheumatic Heart Disease	....	1
Diabetes	....	1
Wry neck	....	1
Haematuria	....	1
Whooping-cough	....	2
Prolapse	....	7
High-blood pressure	....	13

Confinement Results with Particulars :—

No. of deliveries	....	....	....	....	514
Abortions	....	....	....	....	3
Delivered elsewhere	....	....	....	....	4
Of these :—					
Twins, two pairs premature	....	....	....	....	6
Still-born full-time	....	....	....	....	7
Still-born, premature	....	....	....	....	8
Premature living	....	....	....	....	5
Induction	....	....	....	....	30
Forceps	....	....	....	....	46
Caesarian Section	....	....	....	....	1
Breech presentation	....	....	....	....	23
Posterior presentation	....	....	....	....	5
Face presentation	....	....	....	....	1
Eclampsia	....	....	....	....	2
Ante-partum haemorrhage	....	....	....	....	8
Post-partum haemorrhage	....	....	....	....	9
Notifiable puerperal pyrexia	....	....	....	....	30

Foetal Abnormalities :—

Bifid thumb	....	....	....	....	1
Harelip	....	....	....	....	1
Harelip and cleft palate	....	....	....	....	2
Hypospadias	....	....	....	....	1
Hydrocele	....	....	....	....	1
Talipes	....	....	....	....	1

The following table gives the details of confinements of women who had attended the Ante-natal Department, but in whom the child failed to survive :—

No.	Age	Para.	Visits	General and Pre-Natal History.	Details of Confinement.
1	26	1	1	Sent by private midwife. Mother appeared healthy. No history of illnesses. Seen at Maternity Centre one month before confinement. Blood pressure 152/75. Head seemed fixed in brim.	Breech birth.
2	18	1	5	Severe scald 1936 — six weeks in Hospital. Had a pregnancy test performed B.P. varied between 135-118. ? Posterior presentation. Referred to Consultant's Clinic, and decided to be R.O.P. Foetal heart never definitely heard, but movements felt three weeks before admission to Maternity Home.	Admitted prematurely in labour. Position and presentation difficult to determine. Delivered of a dead anencephalic child.
3	36	1	10	No health details recorded. Urine normal. B.P. varied between 118-120. Breech suspected and mother X-rayed—diagnosis confirmed. Some hydramnios. Foetal heart clear two days before admission.	Admitted to Maternity Home 10 days before term. Version performed followed by surgical induction and forceps delivery. Mother had notifiable pyrexia.
4	29	6	6	Much treatment for chronic anaemia. Three abortions with curettage after the last in 1935. First confinement a difficult breech delivery, second in 1934 normal. Present pregnancy some vaginal discharge. Head floating and badly flexed. Foetal heart clear two days before admission.	Delivered in Maternity Home of an anencephalic baby in breech position.
5	28	1	11	Frequent attacks of tonsillitis. Severe headaches during pregnancy. B.P. varied between 125-138. Indigestion and painful micturition. Breech position established two months before term. Referred to Consultant's Clinic. Version attempted which was unsuccessful. Admitted from Ante-natal Clinic on account of toxæmic signs.	Admitted to Maternity Home, and delivered, after medicinal induction of infant in extended breech position.

No.	Age	Para.	Visits	General and Pre-Natal History.	Details of Confinement.
6	23	2	8	Good general health, some headache. One premature confinement 1932 preceded by ante-partum bleeding and albuminuria. Placenta succenturiate. Present pregnancy: B.P. varied between 120-150. Albuminuria on four occasions. Admitted to Maternity Home for rest and observation, remained nearly 3 months. There was continuous albuminuria, no casts, no retinitis. Mother was put on special diet with iron in addition. B.P. varied between 136-146.	Delivered normally at term. Placenta unhealthy with membranes very torn and friable. Mother had trace of albumin in urine on discharge.
7	19	1	9	Good general health. Pregnancy normal. B.P. varied between 130-120. Foetal heart clear 20 days before delivery.	Delivered at term. Doctor called in for prolapse of cord.
8	28	1	7	Good general health. Pregnancy uneventful. Saw Consultant once for ? breech. Admitted to Maternity Home from Ante-Natal Clinic in labour. Foetal heart clear six days before delivery.	Delivered of a deformed child in extended breech position
9	37	5	2	Chorea at 14 years. Highly nervous and excitable. Kidney trouble with all pregnancies: Fibroid removed during second. In bed three months after that confinement and five months before and after last. Albumin present on both visits to Ante-natal Clinic. Was under her own doctor. Admitted to Maternity Home two weeks before term.	Medicinal induction, but no result and pregnancy went to term. The delivery being normal.

No.	Age.	Para.	Visits	General and Pre-Natal History.	Details of Confinement.
10	22	1	7	Rheumatic fever in 1934. In eighth month of pregnancy had severe toxæmic signs, but no albumin in urine at any time. Own doctor called in for slight bleeding and dead baby suspected. Foetal heart was clear 15 days before admission.	Delivered slightly prematurely in Maternity Home of an infant in breech position, macerated.
11	29	1	6	Had had some treatment for ? ovarian trouble. Had albumin in urine on last visit to Ante-natal Clinic. B.P. had been 140/70. Some abdominal pain and swelling of ankles. Admitted to Maternity Home two months before term.	Surgical induction performed a week later. Delivery was normal, but mother had an eclamptic fit afterwards, lasting 3 minutes. She subsequently developed notifiable pyrexia, and still had a trace of albumin on discharge.
12	30	1	4	General health rather below normal for some years, and recent treatment for anaemia. Present pregnancy normal.	Delivered prematurely of infant in extended breech position.
13	37	7	4	No notes as to general health. Varicose veins both legs, and prolapse. Not well during last pregnancy. Baby had spina bifida. Had pains in chest during this pregnancy and hydramnios.	Admitted to Maternity Home ten days before term, and normally delivered of slightly premature infant.
14	35	1	1	Migramic. Pneumonia at 25 years. Came to Ante-Natal Clinic to have pregnancy confirmed. Then about 20 weeks.	Delivered on district prematurely of a macerated foetus.
15	32	2	4	No record of health. First confinement normal. Had cramp in present pregnancy. B.P. 135-130. Foetal heart faintly heard eight days before admission. Hydramnios.	Premature normal delivery of anencephalic child.

No.	Age	Para.	Visits	Mother's History.	Confinement.	Infant's History.
1	22	1	3	No serious illness. Was well during pregnancy except for one bad cold.	Admitted to the Maternity Home two months before term. Normal delivery of dangerously feeble infant.	Doctor was called in to see the child which was very weak and became blue. Death occurred on fourth day.
2	32	1	4	Menstruation always irregular. Had had anaemia as a child. Recently under family doctor for backache. Occasionally had severe frontal headache. Fairly well during pregnancy except for backache and sickness.	Admitted to Maternity Home at term by private doctor for albuminuria. On the fifth day a difficult forceps delivery took place.	The infant's head was damaged at birth. The general condition became worse, and the child died on the second day.
3	38	3	2	General health appeared satisfactory. There had been one stillbirth and the first two confinements were instrumental. Haemorrhoids were present during this pregnancy. On both clinic visits the lie had been abnormal, once being transverse and once being oblique. These were during the 7th and 8th month respectively.	Admitted to Maternity Home at term, and delivered of an anencephalic child in the breech position	The child survived only twenty minutes.
4	30	1	7	One attack of chorea at about 7½ years. Frequent espistaxis. Pregnancy was normal and uneventful.	Normal delivery in Maternity Home.	At 9 days the child developed broncho-pneumonia and died in eleven days.
5	36	2	4	No serious illness. First confinement normal. Varicose veins with this pregnancy. Well all through. Blood Pressure 145/86.	Normal full term delivery in Maternity Home.	Infant developed mastitis and vomited after feeds, on discharge the child was still being very sick and was much below birth weight. It died five days afterwards.

INSPECTION OF MIDWIVES AND NURSING HOMES.

(REPORT by DR. V. REDMAN KING,
Assistant Medical Officer of Health and Inspector of Midwives.)

During 1937, 37 midwives (including 17 at the Maternity Home) notified their intention to practise within the Borough. 20 midwives were practising in the area at the end of the year—5 domiciliary midwives and 8 midwives in institutions employed by the Local Supervising Authority—6 domiciliary midwives and 1 midwife in an institution in private practice.

Under the Midwives Act 1936, four domiciliary midwives, in addition to the Extern Sister at the Maternity Home, were appointed. Four midwives surrendered their certificates. Other than those employed at the Maternity Home, three new midwives notified their intention to practise, one of whom was interviewed at the Public Health Department. She is on the staff of one of the Nursing Homes. The municipal midwives have been fitted out with new uniforms and equipment. They attend the Maternity Clinics with their patients and the Public Health Department every week, where they can consult their supervisor on any special points that have arisen. There is thus a close liaison between the local supervising authority and the municipal midwifery service, which is very useful and helps it run more smoothly.

21 visits were paid to midwives during the year and five visits to the three nursing homes.

904 births—873 live births and 31 stillbirths—were notified in the area. 413 births occurred in the Maternity Home, 40 in other institutions and 451 in domiciliary practice.

The following forms were sent in by midwives :—

Artificial feeding	....	....	....	....	10
Notification of stillbirth	....	....	....	....	4
Notification of deaths in midwives' practice	....				7 mothers
					11 infants
Notification of laying out of dead bodies	....				9 mothers
					9 infants
Notification of infectious conditions and contact with them	....	....	....	....	5

The following are the number of cases and the conditions for which medical aid was summoned by midwives: Engaged in domiciliary practice, 114; in institutional practice, 154, Total 268.

MOTHER.

CHILD.

Ruptured perineum	....	98	Prematurity & feebleness	6
Prolonged labour	....	41	Discharging eyes	.... 2
Ante-Partum Haemorrhage		24	Asphyxia neonatorum	.... 2
Post-Partum Haemorrhage		9	Cleft-palate, Harelip	.... 3
Uncertain, or malpresentation		16	Rash on baby's body	.... 1
Albuminuria	....	14	Macerated stillbirth	.... 1
Pyrexia	....	12	Infant death	.... 1
Adherent placenta	....	6	Haemorrhage of infant	.... 1
Surgical Induction	....	3	Melena	.... 1
Anaesthetic for Version	....	4		—
Eclampsia	....	2		18
Malformation	....	2		—
Inflammation of Rt. Breast		1		
Foetal distress	....	1		
Toxaemia of pregnancy	....	1		
Prolapse of cord	....	1		
Varicose veins	....	1		
Jaundice	....	1		
Hysteria at end of 1st stage		1		
Swelling of legs	....	1		
Pyelitis	....	1		
Nettle rash	....	1		
Vaginal Polypus	....	1		
Severe pain	....	1		
Elderly primipara	....	1		
Poor condition of patient		4		
Patient's own request	....	2		

PUERPERAL PYREXIA.

51 cases of puerperal pyrexia were notified in the Borough, against 29, 47, 51, 56 and 33 for the five preceding years. 38 of the cases occurred in the Maternity Home, 10 in the patients' own homes, one in the Isolation Hospital and two in Nursing Homes.

Of those occurring in the Maternity Home, 11 were in women not natives of Swindon. One case from the Maternity Home, five from patients' own homes and one notified in the Isolation Hospital were treated in the Isolation Hospital. In addition to these Swindon cases, 4 cases of puerperal pyrexia notified in the county were transferred to Gorse Hill Isolation Hospital. Also, two cases of abortion which developed pyrexia (natives of Swindon) were treated in the Isolation Hospital. These cases are not included in the list of puerperal pyrexias because they are not notifiable under the Puerperal Pyrexia Order and the New South Wales Convention is used only in the Maternity Home.

There was one death from puerperal pyrexia not attributable to maternal mortality but to concurrent disease in a woman not a native of Swindon. There was one transferred death of a Swindon woman due to puerperal septicaemia. This death will be attributed to Swindon, though the woman had not been resident in the town for some months before she died. Another death from septicaemia following abortion, though not notifiable as pyrexia, will count as a death from puerperal sepsis.

Notification in the Maternity Home is based on the New South Wales Convention. Outside the Maternity Home it is based on the official Puerperal Pyrexia Order. Of the 38 cases notified in the Maternity Home, 13 were notifiable under the Puerperal Pyrexia Order.

Altogether 61 puerperal pyrexias, of which four were not notifiable and six were not connected with the Borough, were investigated during 1937. The list was made up as follows:—

Puerperal Sepsis. Dr. Thomas's Classification.

Group one	....	....	....	....	....	4
Group two	....	....	....	....	....	8
Group three	....	....	....	....	....	2
Group four	....	....	....	....	....	1
Septic abortion	....	....	....	....	....	5
Phlebitis	....	....	....	....	....	3
Pyelitis	....	....	....	....	....	2
Cystitis	....	....	....	....	....	1
Inflammation of Breasts	....	....	....	....	....	19
Pyrexia of haemorrhage	....	....	....	....	....	2
Pyrexia of pregnancy disease	....	....	....	....	....	2
Influenza	....	....	....	....	....	6
Respiratory Disease	....	....	....	....	....	4
Doubtful	....	....	....	....	....	2

Epidemiologically, the high incidence of breast cases is connected with the widespread epidemic of mumps and dominance of staphylococcus aureus in the first half of the year. The influenzas and respiratory catarrhs are part of the epidemic of influenza which occurred in the early part of the year and the septic abortions and some of the other cases are connected with the outstanding public health tragedy of Swindon in 1937.

MATERNAL DEATHS.

In Swindon investigation into maternal deaths is based on the New South Wales Convention, by which the death of every female between the ages of 15 and 50 is presumed to be due to, or connected with, reproduction unless and until it is proved otherwise.

In 1937, 11 deaths required investigation. This is much the highest in the history of Swindon. Of these, three were not natives of Swindon and it is doubtful if any of the deaths will be considered as belonging to maternal mortality by the Registrar-General. Of the 8 cases belonging to Swindon, one due to puerperal sepsis did not occur in the Town and we know nothing of it except the fact of death and what appears on the death certificate; of the other seven, one was a death from abortion mentioned previously, one was a death certified myocarditis in which there is strong suspicion that death was really due to abortion but this could not be confirmed; one death was due to post-partum haemorrhage, one to ante-partum haemorrhage and three to eclampsia.

OPHTHALMIA NEONATORUM.

Three notifications of ophthalmia neonatorum were received. One was admitted into the Isolation Hospital, but died the same day. No bacteriological examination was made, but from what was seen of the case it is improbable that this was gonorrhoeal. The second case was notified from a nursing home of a child born in a mother not resident in the borough. A bacteriological examination was made in this case—it was not gonorrhoeal. The third case which occurred in private practice was apparently slight. No bacteriological examination was made.

In accordance with a local regulation every midwife in the town has to report to the medical officer of health any case of sore or discharging eyes in an infant whom she is attending. This regulation is rigidly enforced so that nothing that might be of a serious nature can be overlooked.

53 notifications of sore and discharging eyes were received in 1937. Of these, 19 refer to infants born in the Maternity Home,

in all of which a bacteriological examination was made. None was gonorrhoeal. These cases were kept under observation until they were well. All but three were cured before they left the Maternity Home and the three who were not, were subsequently treated until cured at the Infant Welfare Clinic. Of the 34 domiciliary cases 19 were treated at the Infant Welfare Clinic and in all these a bacteriological examination was made. None of them was gonorrhoeal. In addition to the 53, there was one case that had escaped notification which was treated throughout at the Infant Welfare Clinic. It was not gonorrhoeal. The remaining 15 cases which occurred in domiciliary practice and were not seen at the clinic, were visited by the health visitors and reported to be trivial, but no bacteriological examination was made in these cases.

Apart from the prime object of the ophthalmia service, which is to assure that blindness from ophthalmia neonatorum shall cease, the study of the sore and discharging eyes in new born infants is of profound importance to epidemiology, for discharging eyes is usually the first reaction of man to parasitic infection. The Americans have paid considerable attention to these earliest parasitic reactions and discovered many curious facts concerning them. So far as I am aware Swindon is the only place in Britain where systematic bacteriological examination of the ophthalmia of infants has been prosecuted continuously over a reasonable number of years, for here the work started in 1920 and has continued uninterruptedly ever since. It is interesting to record that our experiences confirm the findings of the Americans in the most important particulars. The finding of greatest interest is that the discharge is usually sterile on direct examination of swabs and on cultivation either none, or very few organisms can be grown. The Americans attribute this to the high bacteriolytic property of the lacrymal secretion. It used to be taught, and it may be so still, that a new born infant had no tears, but this is an absurdity, for anyone can find them who looks for them and without tears the cornea would be destroyed in a few hours. The commonest organisms which are found in the discharging eyes of infants are:—pneumococcus, streptococcus, corynebacterium xerosis, Koch-Weeks haemophilus. The last, however, I cannot distinguish from haemophilus influenzae. I have never found bacterium coli. Another point of interest is that a common complication of discharging eyes in infants is blocking of the punctum and it is curious that in these cases some organisms can always be found. No case of ophthalmia in infants in Swindon in 1937 produced any damage to the sight and most of them were trivial matters of a few days' duration.

OPHTHALMIA NEONATORUM.

Year.	No. Notified	Cases of Infantile Ophthalmia due to Gonococcus	Where Treated.				Result.				Not Notified as O.N.	
			Home	Gorse Hill	Clinic	Matern- ity Home.	Nursing Home	Cured	Blind	Injured		Died
*1921	7	?	3	—	4	—	—	7	—	—	—	19
1922	21	?	2	—	19	—	—	20	—	1	—	16
1923	34	23	5	4	25	—	—	30	—	2	—	11
1924	15	13.	—	3	10	2	—	15	—	—	—	12
1925	9	4	1	2	5	1	—	9	—	—	—	11
1926	8	3	—	—	8	—	—	8	—	—	—	22
1927	11	5	1	3	6	1	—	11	—	—	—	15
1928	4	4	—	2	2	—	—	4	—	—	—	30
1929	3	2	—	1	2	—	—	2	—	1	—	28
1930	11	8	1	4	6	—	—	11	—	—	—	58
1931	4	—	—	1	2	1	—	4	—	—	—	55
1932	5	1	1	—	4	—	—	5	—	—	—	49
1933	3	1	1	1	1	—	—	2	—	1	—	46
1934	4	—	2	—	2	—	—	4	—	—	—	52
1935	5	—	2	—	2	1	—	5	—	—	—	60
1936	1	—	—	—	1	—	—	1	—	—	—	35
1937	3	—	1	1	—	—	—	2	—	—	1	50

* These figures are incomplete.

Table showing number of cases of Ophthalmia Neonatorum notified, the number treated, the results of treatment, and the number of deaths occurring. 1937.

No. of Cases Notified.	3	No. of Cases	Vision Unimpaired	Vision Impaired	Total Blindness	Deaths
Treated at Clinic
Treated at Gorse Hill Isolation Hospital	1	....	....	....	1
Treated at Maternity Home
Treated Privately	2	2	....	....	....
TOTALS	3	2	....	....	1

PEMPHIGUS NEONATORUM.

In Swindon every kind of spot that occurs on an infant in the Maternity Home is labelled pemphigus neonatorum and in most, where the spots can be seen on inspection, a bacteriological examination of their contents is made. I recognise five varieties of pemphigus :—syphilitic, gonorrhoeal, true, or epidemic pemphigus which I believe to be a virus disease, streptococcal and staphylococcal. Every spot which occurred in Swindon in young infants in 1937 which was bacteriologically examined was either streptococcal, or staphylococcal. The commonest by far is a reaction to staphylococcus aureus. This is so common that probably no infant lives a fortnight without getting a spot somewhere from which staphylococcus aureus can be grown. It is much rarer to find streptococci, but streptococcal spots are common in the infants of women who develop puerperal sepsis and are also common in the recurrent waves of streptococcal dominance which give us such grave anxiety.

No case of pemphigus which I should consider worthy of notification occurred in Swindon in 1937.

CHILD LIFE PROTECTION—PUBLIC HEALTH ACT, 1936.

The six health visitors are the Infant Protection Visitors under the above Act. 25 boarded-out children were on the Register at the end of the year and 40 supervisory visits were made. No proceedings were taken during the year.

INFANT WELFARE DEPARTMENT.

There was more obvious rickets seen amongst infants in 1937 than for many years past, but there was no scurvy.

My attention was called to three cases of spastic paraplegia and investigation into them led to the proposition that one form of spastic paraplegia may be a deficiency disease caused in the following manner. None of these three children showed any evidence of intercranial injury, which is admitted to be one of the main causes of spastic paraplegia, but all the children had been born prematurely. It has now been proved that during the last two months of gestation the foetus stores within its liver a reserve supply of iron and Vitamin C to last it over the period of lactation, for milk contains very little of these two essentials. Children born prematurely, therefore, will not have these reserves and unless iron and Vitamin C are given to them in addition to their mother's milk they will suffer throughout lactation from lack of them. It struck me that deficiency of iron and Vitamin C might prevent the development of the cord and so lead to spastic paraplegia. Accordingly, these children were treated with iron and Vitamin C in moderate large doses. The parents of the children are convinced that all of them have improved, but in only one am I personally satisfied that improvement has occurred greater than expectation. This child is the only one who was sufficiently young to be hopeful for any form of treatment.

**Table Showing the Number of Visits Paid by the Health Visitors
to Mothers and Children and to cases of Tuberculosis.**

	1933	1934	1935	1936	1937
No. of first visits paid to mothers and children	778	857	945	987	892
No. of revisits	4528	3690	3244	3710	3818
No. of visits paid to expectant mothers	263	183	113	114	161
No. of visits paid to cases of deaths and stillbirths	77	80	60	53	50
No. of visits to cases of Tuberculosis	81	83	59	83	77
No. of visits paid to children aged 1—5 years	5877	4859	4403	4112	4539
	11604	9752	8824	9059	9537

**Record of Work done at the Infant Welfare Centres during the
Years 1933—1937 inclusive.**

	1933	1934	1935	1936	1937
No. of separate Infants who attended the Centre at—					
Eastcott Hill	1315	1280	1189	1223	1117
Pinehurst	153	158	198	348	371
Gorse Hill	255	212	205	210	237
Rodbourne	203	195	250	215	216
TOTAL	1926	1845	1842	1996	1941
Number of Attendances—					
Eastcott Hill	7584	6850	7591	7533	8639
Pinehurst	842	884	1110	2333	2798
Gorse Hill	2047	1644	1699	1630	2269
Rodbourne	2034	1487	1395	1660	2373
TOTAL	12507	10865	11795	13156	16079
Number of cases which received medical advice and treatment	1050	1108	1018	1194	1208
Total Consultations	2874	2899	3252	3941	4482

RECORD OF WORK DONE AT INFANT WELFARE CLINICS
(continued).

	Infants	Toddlers	TOTAL
No. seen and treated during 1937	898	310	1208
No. of consultations	3339	1143	4482
No. of Operations for the removal of Tonsils and Adenoids	1	4	5
No. of Bacteriological examinations	24	—	24
No. of Haematological examinations	9	10	19
No. of X-Rays examinations	3	6	9
No. of Mental Defectives	3	7	10
No. of Physical Defectives	5	4	9
No. of Blind Children	—	1	1
No. of Deaf Children	—	—	—
No. of Mute Children	—	—	—

**Table Showing the Number of Infants and Toddlers referred to
Special Departments for Treatment during 1937.**

	Infants	Toddlers	TOTAL
Dental Clinic	21	143	164
Eye Clinic	17	10	27
V.D. Clinic	2	2	4
Orthopaedic Clinic	7	3	10
Electrical Clinic	16	2	18
Tuberculosis Clinic	—	—	—
Rheumatic Clinic	—	—	—
Ear, Nose and Throat Clinic	3	7	10
TOTAL	66	167	233

THE MILK (MOTHERS AND CHILDREN) ORDER.

	1932	1933	1934	1935	1936	1937
No. of applications granted	270	265	206	205	181	283
Total quantity of Milk issued (Galls)	7025	8320	7105	7627	7910	9638
TOTAL COST (approx.) £	635	770	720	825	856	1047

THE PROVISION OF FREE MILK FOR CHILDREN AGED 1-5.

(By DR. D. S. CLARK, Deputy Medical Officer of Health.)

During the year, a daily issue of one pint of milk was granted to 201 necessitous children between the ages of one and five.

As before, in order that a grant could be earned, the family income had to fall below the scale laid down by the Maternity and Child Welfare Committee, and the child had to show signs of malnutrition.

Of these two conditions, the first was considered the more important, because many of the typical manifestations of malnutrition depend upon long standing deprivations, and indicate permanent physical weaknesses; and if the aim of the scheme is to build children of satisfactory physique, dietetic defects must be righted before the signs appear that permanent damage is done.

In all the cases dealt with, however, the malnutrition was mild and was shown mostly by slight anaemia, nasal catarrh and flabbiness. Of fifty, there were only two whose weight could be considered below average at the time of the grant, and three whose weight increment was unsatisfactory after a regular issue over a period of months.

The increase in the numbers participating in the scheme was gratifying. The consumption of milk is of particularly high value to children between the ages of one and five, not only because this is part of the growing period, but also because it is at this age that the diet is most likely to be unbalanced. In the change from breast feeding to full ordinary diet that is achieved during these early years the tendency appears to be for carbohydrates to bulk too largely in the menu. The carbohydrate foods have wide popularity in the feeding of toddlers. They have gained their place, probably, by their physical appearance of appropriateness their ease of assimilation and the satisfaction they give to the appetite. They are not, however, body building foods, and the quantity consumed of these last can easily be woefully inadequate in a child who is given opportunities for a large consumption of starch. Although a diet in which carbohydrate foods take too large a place cannot be corrected by the addition of a pint of milk, the consumption of such a supplement can go a long way, by supplying the chief deficiencies, first class protein and animal fat, in adequate amount.

INFANTILE MORTALITY.

The deaths of all persons under the age of 25 which occur in Swindon, and of all Swindon children who die away from the Town, are investigated. Some knowledge of the previous history of these children is in the possession of the Health Office and, in an increasing number, the full life histories are available. Since some children die in the institutions of Swindon who do not belong to the Town, and certain other children who have regularly attended the Swindon clinics die elsewhere, these investigations become somewhat complicated. In the review which follows, cognizance is only taken of those deaths which the Registrar-General accredits to Swindon.

STILLBIRTHS.

31 stillbirths were notified in Swindon during 1937, of which 9 which occurred in the Maternity Home, are not accredited to the Borough. This leaves 22 cases belonging to the Borough, against 28, 33, 36, 33, 42, 31 and 27 in the seven preceding years. 12 borough cases and the 9 outside cases were delivered in the Maternity Home.

The 21 stillbirths which occurred in the Maternity Home have been considered already. Of the 10 stillbirths which occurred in domiciliary practice two appear to have been due to pregnancy disease of the mother ; one may have been due to influenza in a mother ; two were certainly due to death of the infant in the course of delivery. The probable cause of the remaining five could not be determined.

DEATHS BEFORE THE END OF THE FIRST DAY.

9 such deaths occurred (7 males and 2 females) against 9, 8 and 9 in the three preceding years.

Two of these occurred in the Maternity Home—the cause of failure of survival being in one anencephaly and in the other placenta praevia of the mother. Of the seven which occurred in domiciliary midwifery, one was certified as being due to prolonged labour, five to prematurity only and one was uncertified. Nothing useful came out of inquiry into these fatalities.

DEATHS BETWEEN THE END OF THE FIRST DAY AND THE END OF THE FIRST WEEK.

7 such deaths occurred (5 males and 2 females) against 17, 15 and 10 in the three preceding years. One was illegitimate.

Of these, three occurred in the Maternity Home. One was due to cerebral haemorrhage during difficult delivery, the other two were certified as having died from prematurity. One who died in the G.W.R. Medical Fund Hospital, was a deformed monster, and of the three which died in domiciliary practice, one was certified as dying from congenital malformation of the heart and the other two of prematurity.

DEATHS BETWEEN THE END OF THE FIRST WEEK AND THE END
OF THE FIRST MONTH.

5 such deaths occurred (4 males and 1 female) against 7, 3 and 5 in the three preceding years.

One died in the Maternity Home from pneumonia. One died in a nursing home from an operation for pyloric stenosis. One, an ophthalmia neonatorum case, died in the Isolation Hospital and of the two who died in domiciliary practice, one was certified as icterus neonatorum and the other feebleness from birth.

NOTE.—In the following paragraphs cases marked * were physically defectives and † were mentally defectives.

DEATHS BETWEEN THE END OF THE FIRST MONTH AND THE END
OF THE FIRST YEAR.

15 such deaths occurred (8 males and 7 females) against 10, 9 and 13 in the three preceding years. One was illegitimate.

4 of these cases had not attended the Infant Welfare Clinic. One, who was born in the Maternity Home, died in the G.W.R. Medical Fund Hospital of pylorospasm. Another died in the G.W.R. Medical Fund Hospital of hydrocephalus.† One died in a nursing home from multiple abscesses and one died at home from broncho-pneumonia, almost for certain whooping-cough.

Of the 11 which had attended the Infant Welfare centre, three had been artificially fed—one died of acute pneumonic tuberculosis; one from otitis media and one from enteritis. The pathological report suggests that this last was not an infective process, but may have been a case of celiac disease. Of the eight which had been breast-fed—one died of hydrocephalus *†; one was a homicide by coal-gas poisoning; one died of lobar pneumonia; two died of whooping-cough pneumonia; one died of influenzal pneumonia and two died from enteritis. The cause of the enteritis in the two last was doubtful.

Altogether the deaths of 36 children under one year of age are accredited to the Borough, of which 21 died within the first month and 15 between the end of the first month and the end of the first year.

DEATHS BETWEEN THE FIRST AND SECOND YEAR.

3 such deaths occurred (1 male and 2 female) against 6, 7 and 3 in the three preceding years.

All were known to the Infant Welfare Department. One was artificially fed and died of whooping-cough. Two were breast-fed, one died from broncho-pneumonia, probably whooping-cough and the third died of appendicitis.

DEATHS BETWEEN THE SECOND AND FIFTH YEAR.

7 such deaths occurred (5 males and 2 females) against 16, 8 and 6 in the three preceding years.

Two of these were not known to the Infant Welfare Department. Both had been breast-fed, one died of appendicitis, the other of acute bronchitis.

Of the five that were known to us, two had been artificially fed. One died of congenital heart disease*; the other of pneumonia, probably whooping-cough. Three had been breast-fed. One died from scalds, one from diphtheria and one from streptococcal tonsillitis*.

DEATHS BETWEEN THE FIFTH AND TENTH YEAR.

3 such deaths occurred (2 males and one female) against 9, 9 and 14 in the three previous years.

All of these children were known to the Public Health Department. One was a homicide by coal-gas poisoning, one died of diphtheria and the third of endocarditis.

DEATHS BETWEEN THE TENTH AND SEVENTEENTH YEAR.

7 such deaths occurred (3 males and 4 females) against 6, 8 and 6 in the three preceding years.

All these were known to the Public Health Department. Two died of diabetes ††, one died of congenital syphilis *†; one died of broncho-pneumonia *†; one died of osteomyelitis *; and two died of tuberculous meningitis.

DEATHS BETWEEN THE SEVENTEENTH AND TWENTIETH YEAR.

4 such deaths occurred (3 males and 1 female) against 8, 7 and 3 in the three preceding years.

Three of these children were known to the Public Health Department. One died of pulmonary tuberculosis; one of lymphatic leukaemia and one of bronchitis and asthma †. The last was not known to us, he died of general paralysis of the insane.

DEATHS BETWEEN THE TWENTIETH AND TWENTY-FIFTH YEAR.

17 such deaths occurred (13 males and 4 females) against 7, 9 and 8 in the three preceding years.

Of these, 7 were not known to the Public Health Department. Of these three died of pulmonary tuberculosis; one was killed by electricity; one was a suicide by train; one died of status epilepticus *†; and one died of pneumonia.

10 were known to the Public Health Department. One died from acute delirious mania ; one from cerebral tumour ; one from disseminated sclerosis ; one from eclampsia ; two died from pulmonary tuberculosis ; one from cerebro-spinal meningitis ; one from lobar pneumonia, one from pneumonia following anaesthesia, and one was killed in a road accident.

NOTES ON CHILD MORTALITY DURING 1937.

In 1937 there was a notable fall in the deaths from diphtheria, a total absence of deaths from measles and scarlet fever and a rise in deaths from whooping-cough, tuberculosis and accidents. There were two homicides occurring in one family at the same time. The brisk rise in the deaths from whooping-cough was due to a severe epidemic of that disease which started late in 1937, was in progress at the end of the year and reached its maximum in February 1938. The rise in deaths from infantile tuberculosis will be referred to in the chapter dealing with that disease. The infantile mortality and death rates in the age periods 0-1, 1-2, 2-5, 10-17, and 17-20 were about up to expectation. The notable drop of deaths in the 5-10 year old period is accounted for by the comparative absence of diphtheria, which in Swindon is the great killing disease of this age period. The deaths between 20-25 were high, accounted for mainly by tuberculosis and diseases of the nervous system. Once again attention may be called to the high fatality amongst defective children. Of the 56 deaths from the end of the first month to the 25th year of life, six were in mentally defective children. These would be severely defective, that is, idiots or imbeciles, for the higher grades of mental defection are seldom determined in the early age periods. So far as my experience goes, mortality of high grade defectives is not different from that of mentally normals. Seven of the deaths occurred among physically defectives, but of these four were also mentally defective, and the other three died of the diseases from which they were defectives.

**Table Showing the Causes of Deaths of Children under 25 years of age
in the Borough of Swindon during the Year 1937.**

CAUSE.	0-1	1-2	2-5	5-10	10-17	17-20	Total under 20	20-25
<i>Congenital, Ante-natal & Natal Defects & Injuries :</i>								
Non-viable Monster	4	—	—	—	—	—	4	—
Congenital Malformations	3	—	1	—	—	—	4	—
Icterus Neonatorum	1	—	—	—	—	—	1	—
Congenital Syphilis	—	—	—	—	1	—	1	—
Injuries at birth	3	—	—	—	—	—	3	—
Unknown	12	—	—	—	—	—	12	—
<i>Post-natal Diseases :</i>								
Diphtheria	—	—	1	1	—	—	2	—
Whooping Cough	3	2	1	—	—	—	6	—
Pneumococcal Diseases	3	—	1	—	1	1	6	3
Meningococcal Disease	—	—	—	—	—	—	—	1
Streptococcal Disease	—	—	1	—	—	—	1	—
Rheumatic Disease	—	—	—	1	—	—	1	—
Tuberculosis	1	—	—	—	2	1	4	5
Appendicitis	—	1	1	—	—	—	2	—
Osteomyelitis	—	—	—	—	1	—	1	—
Otitis media	1	—	—	—	—	—	1	—
Enteritis	3	—	—	—	—	—	3	—
Multiple abscesses....	1	—	—	—	—	—	1	—
Diabetes	—	—	—	—	2	—	2	—
Lymphatic leukæmia	—	—	—	—	—	1	1	—
<i>Nervous Diseases—</i>								
Status Epilepticus	—	—	—	—	—	—	—	1
Delirious Mania	—	—	—	—	—	—	—	1
Infantile General Paralysis of the Insane	—	—	—	—	—	1	1	—
Eclampsia	—	—	—	—	—	—	—	1
Cerebral Tumour	—	—	—	—	—	—	—	1
Disseminated sclerosis	—	—	—	—	—	—	—	1
<i>Accidents—</i>								
Scalds	—	—	1	—	—	—	1	—
Road accident	—	—	—	—	—	—	—	1
Electricity accident	—	—	—	—	—	—	—	1
Suicide	—	—	—	—	—	—	—	1
Homicide by coal-gas poisoning	1	—	—	1	—	—	2	—
TOTALS	36	3	7	3	7	4	60	17

NOTE— The death of every child under the age of 25 years is made the subject of inquiry, in which all matters connected with the medical history of the child are considered and from the available evidence the conclusion is drawn as to what was the main factor which destroyed life. In the above table the deaths are given in accordance with these findings. They agree in number, but not in causes of death, with the official records.

**A TABLE SHOWING THE NUMBERS OF DEATHS OF CHILDREN AND YOUNG PERSONS
UNDER 25 YEARS OF AGE.**

Year.	No. of births	No. of Deaths.					Total deaths under 17	Estim- ated number of sur- vivors.	Neo-natal deaths	Diphtheria	Measles	Whooping Cough	Scarlet Fever	Tuberculosis	Appendicitis	Rheumatism	Accident
		0-1	1-2	2-5	5-10	10-17	17-20	20-25									
1921	1125	76	†	†	†	†			†	2	1	7	1	9	3	1	†
1922	1057	64	15	9	15	11*	†	†	†	1	1	—	1	14	3	1	†
1923	995	52	10	9	7	13*	†	†	†	—	8	17	—	9	2	1	†
1924	968	58	14	14	5	12	†	†	†	—	13	9	1	6	1	1	4
1925	942	53	9	23	9	9	†	†	†	5	6	2	2	11	—	3	1
1926	980	49	12	10	17	12	†	†	†	6	—	4	—	5	2	8	—
1927	830	39	8	5	6	7	†	†	†	3	15	4	—	4	—	1	1
†1928	910	33	10	10	7	6	†	†	†	2	—	13	—	5	—	1	—
1929	867	41	14	12	6	7	†	†	†	1	—	19	—	6	—	4	5
1930	971	61	8	11	19	18	†	†	†	9	7	11	—	6	—	8	3
1931	910	51	5	9	8	11	†	†	†	10	2	—	—	3	—	—	4
1932	887	47	10	15	11	6	5	13	28	8	11	—	—	5	1	—	4
1933	766	40	7	14	6	6	4	17	18	8	—	15	—	—	—	2	6
1934	770	43	6	16	9	6	8	11	33	5	1	3	3	8	—	3	4
1935	720	35	7	8	9	8	7	9	26	10	8	3	5	1	1	1	1
1936	790	37	3	6	14	6	3	8	24	12	1	3	—	5	1	1	1
1937	748	36	3	7	3	7	4	17	21	2	—	6	—	9	2	1	6

* 10-16 years.

† Information not available.

‡ In 1928 the Borough was extended.

Infection and Epidemiology.

EPIDEMIOLOGY.

December 1936 had been a healthy month and at the dawn of the New Year the health of the town was good. 1937 was unusually free from infectious diseases, yet in no previous year had I encountered so many puzzles and alarms that led to nothing. Whether age has so dulled my wits that they worry over things that do not matter, or so sharpened them that they detect events in the changing history of disease which in former years would have passed unnoticed, I cannot determine, but never before had I met with so much to cause me anxiety which eventuated in so little.

Ever since I have been in Swindon I have been puzzled by a form of epidemic diarrhoea which up to 1936 had recurred with unfailing regularity every November. I have always been suspicious that this was some form of dysentery, but never able to prove it. In 1936 I had got ready to establish the nature of this disease when the epidemic period came round in November, but the epidemic disappointed me for the first time and I could prove nothing.

A variety of pneumonia accompanied by jaundice had appeared in the districts round Swindon towards the end of 1936. This had some features which were new to me, the most important of which was its lack of fatality, for it was nearest to a variety with which I am familiar as an invariable fatal disease.

Another puzzle was continued absence of measles which had missed the borough of Swindon for a very long period.

In January we had a widespread epidemic of influenza, but locally it was extremely mild and very different from what was happening in the Home Counties at the same time. Fatality from this visitation was negligible. There was practically no other infectious disease in Swindon during January.

February was surprisingly healthy, with an almost total absence of infectious disease. In one farm in the town there was an outbreak of cow-pox amongst the cattle and seven persons employed in the farm became infected with it. All appeared to be direct infections from animals.

March gave us a great rise in the birth rate and a death rate much below the average. There was one genuine case of diphtheria in this month and there was one notification of dysentery. This case was admitted into hospital. It was not an infectious condition. An epidemic of mumps was widespread over the whole of the south

west of England and we saw plenty of it in Swindon. At the same time there was a high prevalence of inflammations of the breast in nursing mothers and in new-born infants. Since October 1936 staphylococcus aureus had been the dominant parasitic organism locally and this might be connected with the high prevalence of breast inflammations, but none of the breast cases went on to suppuration.

In April there was again one case of diphtheria and a few cases of scarlet fever. There were also two atypical cases of measles, both of which were admitted to hospital under a notification of diphtheria. The death rate continued low and the birth rate high.

In May a whole lot of things seemed to be happening. There were a few odd cases of measles in Swindon and still more in the surrounding districts, but they remained isolated. An extensive outbreak of food-poisoning occurred in a town not far from Swindon and two deaths from it occurred in a Swindon hospital. By an extraordinary piece of luck we had no cases in Swindon itself, though some of the offending food had been for sale in the town. Just about this time there was an increase of diarrhoea in the town, but so far as our investigations could go, none of these cases was due to food-poisoning organisms. In May dominance of staphylococcus gave place to the more common dominance of streptococcus. This was evidenced by the rise in streptococcal disease, particularly sore throat, a slight increase in the prevalence of scarlet fever and anxiety, but nothing more, for the midwifery service. The death rate continued to be low and the birth rate high.

June was a month of worries, though notifiable diseases were almost non-existent. The first sign of trouble was the occurrence of a case of puerperal fever in the Maternity Home. It is unnecessary to say anything of the anxiety and work that this caused, but the issue was successful in so far that the patient herself recovered eventually and no other case of streptococcal infection occurred in the Maternity Home during the remainder of the year. A certain amount of typing had been done to try to find out which types of streptococcus were dominant in the town. It will suffice here to say that they were all found to belong to the higher types and this perhaps explains why during the period of dominance there was very little scarlet fever. There were two or three cases of the June epidemic type of pneumonia and one case of pneumonia which was of a type new to me.

Towards the end of June occurred the beginning of a series of phenonema in connection with the maternity service to which I have drawn attention in a previous chapter of this report. It

should be mentioned again that the trouble with the maternity service occurred before the Municipal midwives were appointed, so they had nothing to do with it. Except for the troubles in the maternity service, nothing important occurred in July.

There was no scarlet fever and only one true case of diphtheria in August. Pneumonias were low in prevalence, but most of the cases which occurred had maniacal delirium. Poliomyelitis occurred in August. There was only one notification in Swindon but investigation of this with a subsequent comb out established the prevalence of a mild outbreak. Throughout the Summer we had a whole series of scares of food poisoning, but actually there was no genuine case in the town.

In September there was a considerable rise in streptococcal sore throat, but very little scarlet fever. In this month we had a fatal case of poliomyelitis. It is uncertain whether this case belonged to our own outbreak, or had been infected in London. In September the death rate rose and the birth rate fell.

In October the annual prevalence of diarrhoeal disease started, but we could get nothing definite out of these early cases. But in November diarrhoea became epidemic and we did have the opportunity of proving that some of the cases were due to the Sonne bacillus. A report on this epidemic written by Dr. Clark, Deputy Medical Officer of Health, appears in the Appendix II.

Towards the end of the year the birth rate fell heavily. In December the two prominent diseases in Swindon were diarrhoea and whooping-cough, the latter of which was severe and increased in severity up to the end of the year. 1938 opened quietly, except for the prevalence of whooping-cough.

DIPHTHERIA.

31 persons were notified as suffering from diphtheria and all were removed to the Isolation Hospital. Of these, 10 only had clinical diphtheria and of these three died giving a fatality rate of 30%. The other cases were: 12 tonsillitis, not of diphtheritic causation; 2 scarlet fever; 2 measles; 1 carrier, non-virulent; 1 carrier, virulent; and 3 nasal carriers in one family, all virulent.

Never has Swindon been so free from diphtheria as in 1937. This was particularly fortunate for the type of diphtheria which did occur was of the same high degree of virulence as that which is general here. There is strong reason to believe that this comparative freedom was due in the main to the immunisation campaign, for though, up to the present, the proportion of persons at risk immunised is theoretically insufficient to have great influence on

the incidence of the disease, most of the children immunised belong to that age-period in which diphtheria is most prevalent. The report on immunisation appears in another part of this report. Should the people of Swindon accept immunisation in the future when the terror of the disease has passed, as they have during the past three years when it was formidable, we can promise that the town can be kept free from diphtheria as a public health menace.

SCARLET FEVER.

There were only 51 notifications of scarlet fever and of these 48 were treated in hospital. All of the notified cases were clinical scarlet fever. There was no fatality and most of the cases were extremely mild. 25 out of the 51 cases notified occurred in the last three months of the year. The topical incidence of scarlet fever corresponds with the dominance of streptococcus. This group of parasites was in recess between October, 1936, and June, 1937, when it resumed its usual position as the most prevalent organism responsible for human disease.

ERYSIPELAS.

There were 16 notifications of erysipelas, 10 of these were treated in the Isolation Hospital. There was one death. All the streptococcal diseases were low in prevalence in 1937 and those which did occur were of low fatality.

PNEUMONIA.

There were 112 notifications of pneumonia, with 31 deaths. 26 cases were removed to the Isolation Hospital. These will be referred to in detail in the Hospital Report. 32 of the cases occurred in January, 17 in February, 14 in March and 13 in December. In January the pneumonias were connected mainly with influenza and with whooping-cough.

THE PNEUMONIAS.

The statistics for Pneumonia for the past seventeen years are as follows:—

Year.	Total No. of cases notified.	Total No. of deaths.	Cases removed to Hospital			Cases treated elsewhere.		
			No.	Deaths	Death Rate	No.	Deaths.	Death Rate.
1921	36	19	....	....	....	36	19	52
1922	156	43	1	0	0	155	43	27
1923	68	28	12	0	0	56	28	50
1924	175	62	31	5	16	144	57	46
1925	204	61	50	10	20	154	51	33
1926	172	52	27	6	22	145	46	32
1927	202	58	63	14	22	139	44	31
1928	204	53	66	16	24	138	37	27
1929	176	54	52	11	21	124	43	34
1930	105	40	44	12	27	61	28	46
1931	143	37	50	8	16	93	29	31
1932	182	44	53	9	17	129	35	27
1933	147	35	25	4	16	122	31	25
1934	154	40	36	3	8	118	37	31
1935	150	29	20	4	20	130	25	19
1936	127	32	18	3	16	109	29	26
1937	112	31	26	4	15	86	27	31
17 years	2513	718	574	109	18.9	1939	609	31.4

THE INFECTIONS DUE TO PARASITES BELONGING TO GENUS BACTERIUM.

There were no notifications of any disease of the typhoid group. Nor were there any cases of Salmonella poisoning in citizens of the town, but towards the end of the year there was an epidemic of dysentery which is referred to in a special report.

THE ACUTE INFECTIONS OF THE NERVOUS SYSTEM.

There were no notifications of encephalitis lethargica. There was one fatal case of cerebro-spinal meningitis. At the end of August there was an outbreak of poliomyelitis. Actually there was only one official notification of a citizen of Swindon on 30-8-37. This case was removed to the Isolation Hospital. On 14-9-37 a notification was received from Victoria Hospital of a patient in that institution who was a native of London and had developed the disease in the neighbourhood of Swindon, but not in the borough itself. This case was severe and eventually sent back to London. On 3-10-37 another case was notified and removed to the Isolation Hospital where she died. This child was a native of London on holiday in Swindon. It is doubtful whether she was infected in London or locally. On 5-11-37 a fourth case was notified by the Medical Officer of Health. This was a missed case discovered in the comb out. Also in the comb out were found two children who lived just outside the borough boundary. I am satisfied that this represents the total for the 1937 visitation so far as the borough is concerned, but of course I cannot speak of the surrounding district, though any children in the surrounding villages in which the suspicion of poliomyelitis was raised were seen by us at the clinic. Of the Swindon cases the only one that was at all severe was the first notification who is left with a moderate degree of paralysis of one leg. The other case which had been missed is left with a very slight paralysis. I cannot say for certain that there were not other cases in which there was no residual paralysis but if there had been they must have been uncommonly slight, because every child who had been sick went through the comb.

NON-NOTIFIABLE INFECTIONS.

Measles once again forgot to visit Swindon in 1937. We had a few stray cases of the disease to remind us that it is not exterminated, but nothing else. There were no deaths due either directly, or indirectly, to measles. Mumps was very widely prevalent in Swindon and throughout the whole of the south west England. There was comparatively little chickenpox and no German measles. Whooping-cough was troublesome in the beginning of the year and again at the end. It assumed epidemic

prevalence in December and rose to be a serious problem in the early months of 1938. I am becoming convinced that we shall never get the better of whooping-cough until we change its name, for the whoop, though diagnostic when it is present, is seldom present in young children and very rarely indeed in cases which end fatally. A scrutiny of the infant mortality in various parts of the World, particularly in those where the rate is low, leads me to suspect that most fatal cases of respiratory disease in children under three years old are really due to whooping-cough. If this is so, whooping-cough has a mortality higher than that of any other endemic infection and this, I believe, to be the case, though there is so much obscurity about the disease and so little attention has been paid to it clinically, that it is difficult to be sure of any facts relating to it.

In January there was an epidemic of influenza in Swindon which was widespread, but exceedingly mild and produced no ascertainable influence upon the mortality table.

HEALTH EDUCATION OF GENERAL PUBLIC.

The main channel of diffusion of public health matters in Swindon is the local edition of "Better Health." This is supplemented by a considerable number of lectures which are given annually by the medical officer of health. In 1937 the chief matters which were brought before the public were nutrition and cancer. The cancer index in Swindon in 1936 was 2070, which is exceptionally high and consideration of the cancer cases in detail showed us very clearly that a large number of deaths could have been prevented had the sufferers sought treatment earlier. There is absolutely no difficulty in Swindon in obtaining medical advice and appropriate treatment and it seemed to me that there was a hope of diminishing our cancer fatality by bringing the subject of early recognition and treatment prominently before the people.

PREVENTION OF BLINDNESS.

No action was taken under Section 66 of the Public Health Act, 1925, or under Section 176 of the Public Health Act, 1936.

TUBERCULOSIS.

No action was taken under the Public Health (Prevention of Tuberculosis) Regulations, 1925, or under Section 62 of the Public Health Act, 1925, or Section 172 of the Public Health Act, 1936.

In 1937 there was a slight rise in the notifications of respiratory tuberculosis and a more considerable rise in the notifications of

other forms of tuberculosis. The death rate for respiratory tuberculosis was the same as in 1936, but the rate for all forms rose from 0.45 to 0.47. During the last few years the variations in the tuberculosis statistics have not been significant, but a factor of great importance is the apparently brisk rise in the tuberculosis in children both of the respiratory and non-respiratory forms. In 1937, 23 out of the 54 notifications of pulmonary tuberculosis were in persons under the age of 25, of which eight were under the age of 15, and of the 23 notifications of non-respiratory tuberculosis 16 were under the age of 25. Much the most disturbing factor is the eight notifications of pulmonary tuberculosis in children under the age of 15. A scrutiny of these reveals the following :—

- | | |
|-----------------|--|
| Girl, aged 2. | Notified as pulmonary tuberculosis. The child had whooping cough at the time of notification and died a week later. No mention of tuberculosis appears on the death certificate. |
| Girl, aged 5. | Not born in Swindon, came to live here last year. This notification is a transfer. It appears that this child has got pulmonary tuberculosis. |
| Girl, aged 10. | Notified as pulmonary tuberculosis and admitted to a sanatorium. There found not to be tuberculous, so the case was removed from the register. |
| Girl, aged 14. | Rapid pulmonary tuberculosis. She died early in 1938. |
| Boy aged 8mths. | Died of acute pulmonary tuberculosis. Verified post-mortem. |
| Boy, aged 12. | This is a transfer from another district. |
| Boy, aged 13. | This is a contact case. The disease is not active. |
| Boy, aged 14. | Admitted to a sanatorium and notified as T.B. lungs on discharge. |

In addition to these is a boy aged 9 who appears on the non-pulmonary list under the notification of miliary tuberculosis. He was notified in December 1937 and died in January 1938. The death certificate was signed acute miliary tuberculosis of the lungs.

The list is therefore less formidable than it appeared at first. Still it is unusual. Of recent years pulmonary tuberculosis in children has been almost non-existent in Swindon.

GENERAL OBSERVATIONS ON VITAL STATISTICS.

The Registrar-General gives us a population of 60,170 for the middle of 1937. This is the first time for six years that the population has not declined and the increase over that of 1936 was only 20. The births in 1937 numbered 748 and the deaths 673 giving us a natural increase of 73, so migration must still be against us.

The births (748) were 42 fewer than in 1936 and gave a birth-rate of 12.43 which is 0.70 below that of 1936 and is the lowest recorded in the borough except 12.32 in 1935. The deaths, numbering 673, were 54 fewer than in 1936 and gave a crude death rate of 11.18 against 12.15. Rather more than half of the "lives saved" were accounted for by the reduction of deaths from cancer from 125 to 96. This is the most favourable item in the vital statistics of Swindon for 1937. To what extent, if any, this reduction in deaths from cancer is due to the effort made to reduce it, posterity must decide. Dearly as I should like to believe it was so, it is not likely that anything done in 1937 would have reduced cancer mortality for that year; but the coincidence is useful.

The maternal mortality of Swindon in 1937 was 9.08, so for the year Swindon was a "black area"—a bitter pill to swallow, for we have prided ourselves on our persistent low maternal mortality and the efforts we have made to obtain it. I have dealt with this matter in the Maternity and Child Welfare section of the report and shall say no more about it here, but should the experience of 1937 be repeated in 1938, a great deal more will be heard about it. The infant mortality at 48.13 was 1.29 higher than that of 1936. Fifteen deaths between the end of the first month and the end of the first year is an unfavourable record and its composition is disquietening. The adolescent mortality (20 to 25) was also unfavourable. Yet the general death rate of 11.18 is favourable, for adjustment for population distribution does not alter it more than 0.01. On the whole we must call 1937 a favourable year for the health of Swindon, but I am far from contented with its record.

DUNSTAN BREWER,

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Public Health Department,
Civic Offices,
SWINDON.

DIPHTHERIA IMMUNISATION 1937.

(By Dr. D. S. CLARK, Deputy Medical Officer of Health.)

Immunisation against diphtheria was continued during 1937. The means of bringing the service to the notice of parents was on the same lines as employed in previous years. There was no advertisement, but the facilities were made known to the mothers by the health visitors, and a letter was addressed to the parents of each infant school entrant acquainting them with the scheme, and inviting their child's attendance.

The chief obstacle in the way of progress to an immune school population is still indifference. Apart from this the handicap does not appear to be hostility, but a gross over-estimation by parents of the severity of the process and the liability to reaction following the injections. The commonest comments on the procedure by parents attending are of its brevity and simplicity, and could the population at large be convinced of this, I think the response would be much better.

The total number on whose behalf acceptance was tendered and who were presented for immunisation during 1937 was 289. Of these 59% were of the age of school entrance (between 3 and 5) 10% were below, and 31% were over. These last two percentages give some measure, perhaps, of the value of the work of the health visitors and teachers in publicising the service.

The method of immunisation adopted throughout the year was the administration of three doses of antigen (T.A.F.) at fortnightly intervals without a preliminary Schick test in children under 10 years of age, except in special circumstances. The high percentage of susceptibles below this age, and the remote possibility of error leading to a misinterpretation of the patient's resistance, justify this course, which has the advantage of reducing the visits, in a susceptible case, by two. Post Schick testing to assess the immunity gained was offered after an interval of three months or slightly longer.

Preliminary Schick testing was adopted in 11 cases, of which 8 proved susceptible, and were subsequently given a course of injections.

The number of children who completed the course of immunisation during 1937 was 278, of which 19 were cases carried forward from 1936.

Undesirable reaction after injection occurred in 2 cases (.7% of total immunised). In one case aged 9 years there was local

swelling and pain after injection, without temperature or general symptoms. In the other there was local pain only.

6 failed to complete the course after one injection, and 5 after two injections, one of these after reaction to the injections, and several others after interruption by illness. This figure 4% is low.

A posterior Schick test, to assess the acquired immunity was accepted by 613 cases in 1937. Of the cases who completed their course in 1936, 76% attended; of those immunised during 1937, 88% attended. The reading of the test was carried out one week after the test dose was given. Those who proved "negative" *i.e.*, immune, numbered 609. Positives numbered only 4, giving the figure of 99.35% successful immunisations. The fact that a preliminary Schick test was not done and that the total of "successes" therefore contains a number of naturally immune children does not affect this figure to any extent.

"Pseudo reaction" a phenomenon of interest but of no importance from the point of view of the efficiency of the immunisation, was noted 4 times. Two of these occurred in children who had shown reactions to the injections.

Of the 4 cases who showed Schick positive (susceptible) reactions after the course of three injections, one gave a negative reaction three months after the fourth injection, two have had a fourth injection and are awaiting a further Schick test, and one is awaiting the fourth injection.

SUMMARY OF THE WORK DONE DURING THE YEAR.

Preliminary Schick tests	....	....	....	....	11
Positive	....	....	....	....	8
Negative	....	....	....	....	3
No of patients immunised	....	....	....	....	278
,, carried over 1936-37	....	....	....	....	19
,, carried over 1937-38	....	....	....	....	20
,, failing to complete the course of injections	....	....	....	....	11
Posterior Schick tests	....	....	....	....	613
Positive	....	....	....	....	4
Negative	....	....	....	....	609
Total number of attendances at the Clinic	....	....	....	....	2330

Cases notified as diphtheria during 1937, that had been immunised or received anti-diphtheritic injections, numbered 9.

In only one case in which a full course of injections had previously been given, was the final diagnosis diphtheria, although even in this there was an element of doubt.

Case one C.B. aged 6 years. Course of T.A.F. 13-3-36—9-4-36. Post-schick negative 5 months after. Admitted Isolation Hospital notified diphtheria 5-12-37. Appearances suggested mild diphtheria. Swabs negative. Contacts' swabs negative.

One child was admitted to hospital with diphtheria, and died, who had received one injection only, just prior to her illness. The injection, of course, can afford no protection in a case of this sort. The material used for injection does not protect against diphtheria, but stimulates the body to form its own protective substances, a process that takes up to three months to complete.

Case two Y.P., aged 4 years. One dose of T.A.F. 30-9-37. Admitted to hospital with nasal diphtheria 5-10-37. Died 13-10-37. Cause of death — Diphtheria.

These were two cases who had been protected, that were admitted to hospital after diphtheria organisms had been detected in their throats.

Case three M.S., aged 4 years. Course of T.A.F. 19-3-36 to 23-4-36. Schick negative four months later. Notified nasal diphtheria 18-5-37. No clinical signs of disease. Organisms isolated proved non-virulent.

Case four. R.B., aged 7 years. Course of T.A.F. 6-2-36 to 27-2-36. Schick negative five months after. 28-7-37 admitted to Isolation Hospital as diphtheria. Organisms present, but no signs of disease.

The five other cases notified as diphtheria proved to be other conditions.

L.B., aged 5 years. Course of T.A.M. and T.A.F. 6-3-36 to 3-4-36. Notified as diphtheria 28-4-37. Corrected diagnosis tonsillitis.

R.H., aged 4 years. Course of T.A.F. 28-9-36 to 19-10-36. Schick test negative 3 months after. Admitted to Isolation Hospital 5-5-37 as diphtheria. Corrected diagnosis tonsillitis.

D.B., aged 11 years. Schick test 5-12-35 negative. Admitted to Isolation Hospital 16-5-37 as diphtheria. Corrected diagnosis measles.

D.J., aged 13 years. Schick test 13-2-36 negative. Admitted to Isolation Hospital 4-11-37 as diphtheria. Corrected diagnosis tonsillitis.

M.W., aged 6 years. Course of T.A.F. 30-1-36 to 17-2-36. Schick negative 4 months after. Admitted to Isolation Hospital as diphtheria 28-11-37. Corrected diagnosis tonsillitis.

APPENDIX ONE.

Admissions to Swindon Maternity Home from May to September, 1937, with a comparable table of the admissions from July to September, 1933. Also, table showing the numbers of notifications of births arranged in months during the seven years 1931-1937.

NOTES.

Swindon Maternity Home accepts all abnormal and difficult obstetric cases from the town and the north part of Wiltshire, so the proportion of abnormal to normal cases is high.

40% of the births in Swindon take place in the Maternity Home.

In the Home the temperature is taken four-hourly throughout the whole of the puerperium and the charts are described as:—

- (1) N. or normal, if there is no record above 99.
- (2) Irreg. Irregular, if there is no record above 100.
- (3) Pyrexia, if there is no record above 102.
- (4) Fever, if there is a record above this.

In each case, other than normal, the highest reading is given.

The cypher P.N., which stands for pemphigus neonatorum, is used to cover all cases of spots in infants however trivial.

The cypher O.N.—ophthalmia neonatorum—is used to cover all sore and discharging eyes however trivial.

ADMISSIONS TO THE MATERNITY HOME BETWEEN 1-7-33 and 30-9-33.

During this period the weather was warm and dry. There was no dominant disease in the district and the birth rate was extremely low.

<i>Date of Delivery.</i>	<i>Character of Labour.</i>	<i>Character of Temperature.</i>	<i>Character of Pyrexia</i>	<i>Notes.</i>
3-7-33	—	Normal		
3-7-33	—	Irreg. 99.6		Infant O.N. Bac. S.
3-7-33	—	Irreg. 99.8		
4-7-33	—	Irreg. 99.4		
4-7-33	R.P.	Pyrexia 100.6	B.	Notified
10-7-33	Induction	N.		
11-7-33	—	Irreg. 99.2		
12-7-33	—	Fever 102.4	A. & C.	Notified
13-7-33	—	N.		
14-7-33	—	Irreg. 100	A.	
15-7-33	Ceasarean Section	Pyrexia 100.4	B. & E.	Notified
18-7-33	—	Irreg. 100	B.	Infant stillborn
18-7-33	Forceps	Irreg. 100		
18-7-33	—	Irreg. 99.4		
19-7-33	—	Pyrexia 101	D.	
19-7-33	—	Pyrexia 101	C.	
20-7-33	—	Pyrexia 100.4	D.	
22-7-33	—	Irreg. 99.2		
22-7-33	R.P.	Fever 101.4	B.	
23-7-33	—	N.		
24-7-33	R.P.	Irreg. 99.2		
25-7-33	—	Irreg. 99.2		
26-7-33	—	Irreg. 99.8		
31-7-33	—	Irreg. 99.2		
4-8-33	Induction	Irreg. 100		
6-8-33	Forceps	Pyrexia 100.4	B.	
6-8-33	—	Fever 101.4	C.	
6-8-33	—	Irreg. 100		
7-8-33	R.P.	N.		
9-8-33	R.P.	Irreg. 99.2		
11-8-33	Forceps			
	R.P.	Fever 101.4	B.	Notified
11-8-33	—	N.		
11-8-33	R.P.	Irreg. 100		
13-8-33	—	N.		
15-8-33	—	Fever 104	E.	Notified
17-8-33	—	Irreg. 99.2		

<i>Date of Delivery.</i>	<i>Character of Labour.</i>	<i>Character of Temperature.</i>	<i>Charac- ter of Pyrexia</i>	<i>Notes.</i>
19-8-33	R.P.	Pyrexia 101	A.	
20-8-33	—	Pyrexia 101	B.	Infant pyrexia 101
21-8-33	Forceps			
	R.P.	Irreg. 99.8		
22-8-33	Induction	Fever 102	C.	Notified
24-8-33	—	Irreg. 99.8		
27-8-33	—	N.		
30-8-33	R.P.	Fever 101.2	D.	
2-9-33	—	N.		
2-9-33	Forceps			
	R.P.	Irreg. 99.6		Infant pyrexia 104
4-9-33	—	Fever 101.6	D.	Notified
5-9-33	Forceps	Fever 101.2	B.	Infant pyrexia 102.6
8-9-33	Induction	Pyrexia 100.6	C.	Notified.
9-9-33	Induction	N.		
14-9-33	—	N.		
15-9-33	—	Irreg. 99.4		
20-9-33	—	Irreg. 99.4		Infant O.N. Bac. Pn.
21-9-33	Caesarean			
	Section	Irreg. 99.6		
22-9-33	Forceps			
	R.P.	N.		
22-9-33	Forceps	Fever 102.2	B.	Notified
	R.P.			
23-9-33	—	N.		
23-9-33	—	Irreg. 99.2		
24-9-33	Forceps	N.		
26-9-33	—	Irreg. 99.6		
27-9-33	—	N.		
27-9-33	R.P.	Irreg. 99.4		
28-9-33	Forceps			
	R.P.	Irreg. 100	B.	Infant O.N. Bac. Pn.
29-9-33	—	Irreg. 99.4		

ADMISSIONS TO THE MATERNITY HOME MAY TO
SEPTEMBER, 1937.

<i>Date of Delivery.</i>	<i>Character of Labour.</i>	<i>Character of Temperature.</i>	<i>Notes.</i>
2-5-37	Normal	Normal	—
3-5-37	R.P.	Irreg. 99.2	—
3-5-37	N.	N.	—
4-5-37	N.	N.	—
5-5-37	R.P.	N.	—
5-5-37	N.	Irreg. 99.2	—
6-5-37	N.	Pyrexia 100.6	Breast
7-5-37	N.	N.	—
7-5-37	N.	Irreg. 100	Breast
8-5-37	N.	Irreg. 99.4	—
10-5-37	N.	N.	—
10-5-37	Difficult Labour	Pyrexia 100.2	Anencephaly
11-5-37	N.	N.	—
11-5-37	N.	N.	—
12-5-37	N.	N.	—
13-5-37	N.	N.	—
13-5-37	N.	Pyrexia 100.4	O.N. Sterile Retention of Membrane
14-5-37	N.	N.	—
15-5-37	N.	N.	—
15-5-37	N.	N.	Patient abscess of the lower jaw on admission
20-5-37	R.P.	N.	—
20-5-37	N.	Irreg. 99.4	—
21-5-37	R.P.	Irreg. 99.2	Baby fever 103.4 Probably Pneumonic
23-5-37	N.	Irreg. 100	Breast
24-5-37	R.P.	N.	—
24-5-37	N.	N.	—
25-5-37	Version	Pyrexia 100.2	Baby stillborn
26-5-37	Forceps	Pyrexia 100.8	—
26-5-37	Forceps	N.	—
26-5-37	N.	Pyrexia 101	Breast
27-5-37	Forceps	N.	—
27-5-37	Hydramnios Twins	Fever 102	Notifiable. Group 2. One child anence- phaly.
28-5-37	N.	Irreg. 99.2	—
28-5-37	Induction	Fever 103.8	Notifiable. Breast.
30-5-37	N.	Fever 102	Notifiable. Breast. Baby P.N. Staphy- lococcus Aureus,

<i>Date of Delivery.</i>	<i>Character of Labour.</i>	<i>Character of Temperature.</i>	<i>Notes.</i>
2-6-37	Footling Presentation R.P.	Irreg. 99.6	Baby stillborn. Breasts.
2-6-37	N.	N.	—
2-6-37	N.	N.	—
3-6-37	N.	N.	Breasts.
4-6-37	Induction	Fever 102.4	Notifiable. Breasts. Baby O.N. Bacteriology Xerosis, pneumococcus streptococcus.
4-6-37	N.	N.	—
5-6-37	N.	N.	—
5-6-37	P.P.H.	Irreg. 99.4	—
6-6-37	Induction	N.	—
6-6-37	N.	Pyrexia 101	Notifiable Group ?
8-6-37	N.	Irreg. 99.2	Breasts. Infant congenital hydrocele.
8-6-37	N.	Pyrexia 101	Notifiable Group 2. Whitlow of finger streptococcus typed.
9-6-37	R.P.	Pyrexia 101	Breasts.
9-6-37	N.	N.	Baby cleft-palate.
11-6-37	N.	N.	—
12-6-37	N.	Fever 101.6	Notifiable. Streptococcal peritonitis. Removed to Isolation Hospital.
14-6-37	N.	Irreg. 99.6	Breasts
14-6-37	N.	Pyrexia 101	Notifiable. Breasts. Baby O.N. sterile
14-6-37	N.	N.	Baby anencephaly.
16-6-37	N.	N.	Baby cleft-palate.
16-6-37	R.P.	Irreg. 99.4	—
17-6-37	Induction	N.	Baby O.N. Sterile.
17-6-37	N.	N.	Baby P.N. staphylococcus aureus. O.N. streptococcus.
18-6-37	R.P.	Fever 101.2	Notifiable. Cystitis.
18-6-37	N.	N.	—
19-6-37	N.	Irreg. 100	Baby O.N. Pneumococcus.
20-6-37	Abortion	N.	—
22-6-37	Induction	Irreg. 99.4	Breasts.
22-6-37	R.P.	Irreg. 99.2.	Baby O.N. Sterile.

<i>Date of Delivery.</i>	<i>Character of Labour.</i>	<i>Character of Temperature.</i>	<i>Notes.</i>
23-6-37	N.	N.	Baby P.N. streptococcus.
24-6-37	N.	N.	—
24-6-37	R.P.	N.	—
25-6-37	R.P.	N.	Breast.
26-6-37	N.	N.	Baby O.N. Pneumococcus streptococcus.
26-6-37	N.	Irreg. 99.4	—
26-6-37	N.	Irreg. 99.2	—
27-6-37	N.	Pyrexia 100.4	Breasts
27-6-37	A.P.H.	N.	Baby stillborn.
28-6-37	N.	N.	—
28-6-37	R.P.	N.	—
1-7-37	Induction R.P.	Irreg. 99.4	A.N. Albuminuria. Baby O.N. Sterile.
2-7-37	N.	N.	—
3-7-37	N.	N.	Baby O.N. No bacteriological examination.
3-7-37	N.	N.	—
3-7-37	N.	Irreg. 99.4	Baby O.N. No bacteriological examination.
4-7-37	N.	Irreg. 99.2	—
4-7-37	N.	Pyrexia 100.2	Breasts.
5-7-37	N.	Irreg. 99.2	—
5-7-37	R.P.	Irreg. 99.6	Breasts.
5-7-37	N.	N.	Baby P.N. staphylococcus aureus.
6-7-37	N.	Irreg. 99.2	—
6-7-37	P.P.H.	N.	—
7-7-37	R.P.	Pyrexia 101	Notifiable. Breasts.
8-7-37	Induction R.P.	Irreg. 99.8	—
8-7-37	N.	N.	—
9-7-37	R.P.	Irreg. 99.4	—
9-7-37	R.P.	Pyrexia 100.2	—
10-7-37	N.	N.	—
10-7-37	Eclampsia	N.	Patient died undelivered.
11-7-37	N.	Pyrexia 100.2	Baby mastitis.
11-7-37	N.	N.	Baby died.
12-7-37	N.	N.	—
12-7-37	N.	N.	—
14-7-37	N.	Irreg. 99.4	—
15-7-37	N.	Irreg. 100	—
15-7-37	N.	Irreg. 100	—
15-7-37	N.	N.	Baby P.N. staphylococcus aureus.

<i>Date of Delivery.</i>	<i>Character of Labour.</i>	<i>Character of Temperature.</i>	<i>Notes.</i>
17-7-37	R.P.	Irreg. 99.8	—
17-7-37	Albuminuria Induction	Fever 101.6	Notifiable Group 5.
18-7-37	A.P.H.	Irreg. 99.2	Phlebitis. Infant still- born.
18-7-37	Albuminuria	N.	—
19-7-37	N.	Irreg. 99.4	—
20-7-37	Forceps R.P.	N.	—
24-7-37	N.	Irreg. 99.2	Baby O.N. sterile.
24-7-37	N.	N.	—
26-7-37	R.P.	N.	—
28-7-37	Albuminuria. Induction R.P. Forceps.	Irreg. 99.4	—
30-7-37	N.	N.	—
1-8-37	A.P.H.	—	Died undelivered.
2-8-37	Albuminuria	Irreg. 99.8	—
2-8-37	Forceps	Irreg. 99.6	—
2-8-37	A.P.H.	Irreg. 99.4	—
3-8-37	R.P.	N.	Baby P.N.
4-8-37	N.	Irreg. 99.4	—
5-8-37	N.	N.	—
5-8-37	N.	N.	—
5-8-37	R.P.	Irreg. 99.6	—
6-8-37	N.	N.	Baby P.N.
7-8-37	Albuminuria	N.	—
7-8-37	N.	N.	—
8-8-37	A.P.H.	Pyrexia 100.4	—
9-8-37	N.	N.	—
11-8-37	Albuminuria. Induction. Forceps.	N.	Baby O.N. K.W.
13-8-37	N.	Irreg. 99.8	—
14-8-37	N.	Irreg. 99.4	—
14-8-37	N.	N.	—
15-8-37	N.	N.	Baby stillborn
15-8-37	N.	N.	—
16-8-37	N.	Fever 103.4	Notifiable. Breasts.
18-8-37	R.P.	N.	—
21-8-37	N.	N.	—
21-8-37	R.P.	Pyrexia 100.6	—
22-8-37	N.	Pyrexia 100.6	—
22-8-37	Albuminuria	Irreg. 99.2	—
22-8-37	N.	N.	—
23-8-37	Albuminuria	Irreg. 99.2	—
23-8-37	N.	N.	—

<i>Date of Delivery.</i>	<i>Character of Labour.</i>	<i>Character of Temperature.</i>	<i>Notes.</i>
23-8-37	R.P.	Irreg. 99.2	—
23-8-37	N.	Irreg. 99.2	—
23-8-37	N.	Irreg. 99.8	—
24-8-37	Forceps. R.P.	Pyrexia 100.4	—
24-8-37	A.P.H. R.P.	Irreg. 99.2	Baby stillborn.
24-8-37	Eclampsia	—	Mother died.
25-8-37	N.	Irreg. 99.2	—
29-8-37	Eclampsia	—	Died undelivered.
29-8-37	R.P.	Irreg. 99.6	—
30-8-37	N.	N.	—
30-8-37	P.P.H.	Pyrexia 101	Notifiable-Group 5
30-8-37	A.P.H.	Irreg. 99.8	Baby stillborn
31-8-37	Induction	N.	—
1-9-37	R.P.	Irreg. 99.6	—
1-9-37	A.P.H.	Pyrexia 101	Notifiable - Group 5.
	Delivered at home		Baby P.N.
2-9-37	N.	Fever 101.6	Breasts.
4-9-37	N.	Irreg. 99.8	—
5-9-37	Difficult labour	N.	Baby P.N.
6-9-37	N.	N.	Baby hypospadias
7-9-37	Induction	Pyrexia 100.6	Breasts.
8-9-37	N.	N.	Baby O.N. sterile
9-9-37	N.	N.	Baby profuse nasal discharge-sterile
14-9-37	N.	N.	—
17-9-37	R.P.	N.	Pyelitis A.N. with pyrexia
17-9-37	Difficult labour R.P.	Irreg. 99.4	Baby stillborn
17-9-37	Forceps	N.	—
18-9-37	N.	Irreg. 99.8	Macerated foetus
20-9-37	Forceps	N.	—
24-9-37	N.	N.	Baby P.N.
26-9-37	Induction	Irreg. 99.2	—
26-9-37	N.	Fever 101.6	Notifiable—breasts.
			Baby P.N.
27-9-37	Hydramnios	Irreg. 100	Baby stillborn
27-9-37	R.P.	N.	—
28-9-37	N.	N.	—
28-9-37	N.	N.	Baby P.N.
29-9-37	N.	N.	Baby O.N. sterile.
30-9-37	N.	N.	—

TABLE SHOWING THE NUMBERS OF NOTIFICATIONS
OF BIRTHS ARRANGED IN MONTHS DURING THE SEVEN
YEARS 1931 — 1937.

		1931	1932	1933	1934	1935	1936	1937	Total.
January ....	....	81	96	77	82	59	88	74	557
February ....	....	62	68	70	79	65	64	71	479
March ....	....	95	90	87	80	68	77	96	593
April ....	....	100	100	83	77	90	76	75	601
May ....	....	78	95	97	91	72	114	74	621
June ....	....	90	86	73	65	83	62	88	547
July ....	....	79	85	61	74	66	85	83	533
August ....	....	81	81	62	69	82	76	82	533
September ....	....	70	69	56	65	75	76	56	467
October ....	....	80	79	84	87	79	92	72	573
November ....	....	73	66	62	66	62	57	64	450
December ....	....	81	88	78	84	54	72	69	526
TOTALS ....	....	970	1003	890	919	855	939	904	6480

APPENDIX TWO.

ENTERITIS—SWINDON, 1937-38.

(By Dr. D. S. CLARK, Deputy Medical Officer of Health.)

An outbreak of enteritis occurred in Swindon between November 1937, and February 1938. The number of cases notified during this period was 47.

CLINICAL FEATURES.

Bearing in mind that these 47 were a sample selected for severity, *i.e.*, all were of persons who considered themselves sufficiently ill to require medical attention, the attacks were slight.

Patients were removed to hospital in 3 cases. All were at the beginning of the outbreak and their removal was in the interests of diagnosis rather than treatment.

The illness consisted of an attack of diarrhoea (in all cases 100% of the series) producing loose motions about five to ten times a day. Mucus occurred in the stools in some cases, especially in young children. Streaks of blood also occurred in the motions sometimes (in 5 cases, 11%). Initial vomiting was present in many (in 15 cases, 32%) and abdominal pain associated with colic also (in 14 cases, 30%). Constitutional symptoms were not marked or severe; patients were ambulant in 28 cases, 60% and the disease ran a rapid course as a rule, the diarrhoea abating on the 2nd day and disappearing by the 4th. The average duration of the illness in the 47 cases was 3.9 days, the extremes being 1 and 14. The commonest duration was 3 days.

Classifying the cases arbitrarily as "severe" when more than 10 motions were passed in 24 hours at the worst period and/or blood appeared in the stools: "moderate" when between 5 and 10 motions were passed and/or the patient was confined to bed, and "mild" when no more than 5 motions were passed per day and the patient was ambulant:—

8 cases were "severe"	....	17%
11 cases were "moderate"	....	23%
28 cases were "mild" ....	....	60%

The picture shown by these cases accords well with the accepted description of dysenteric infection due to B.Sonne in its milder form.

Pathological examination of the stools was carried out in 21 cases. Rapid convalescence rendered many examinations nugatory as the patient had recovered before specimens could be collected, and it is felt that the high proportion of negatives among the examinations may also be due to the brevity of the infection.

Of these 21 specimens, B. dysenteriae Sonne was re-	
covered from	7
Stools suggestive of dysentery	
no organisms recovered	5
Stools negative	9
(Other pathogenic organisms, 0)	

INCIDENCE.

Age Distribution.

	0-5	5-15	15-25	25-35	35-45	45-55	55-65	65 & over
Total	14	7	6	9	4	4	2	1
Severe	1	2	2	0	3	0	0	0
Moderate	4	2	4	1	0	1	0	0
Mild	9	3	0	8	1	3	2	1

This table suggests that there was no special age incidence.

Weekly incidence dated by onset of symptoms.

30-10-37—	6-11-37	....	....	1
7-11-37—	13-11-37	....	....	0
14-11-37—	20-11-37	....	....	0
21-11-37—	27-11-37	....	....	2
28-11-37—	4-12-37	....	....	6
5-12-37—	11-12-37	....	....	5
12-12-37—	18-12-37	....	....	5
19-12-37—	25-12-37	....	....	10
26-12-37—	1-1-38	....	....	1
2-1-38—	8-1-38	....	....	0
9-1-38—	15-1-38	....	....	5
16-1-38—	22-1-38	....	....	3
23-1-38—	29-1-38	....	....	3
30-1-38—	5-2-38	....	....	5
6-2-38—	12-2-38	....	....	1

Monthly incidence (by date of notification) correlated with the district in which the cases occurred.

	North Ward	South Ward	East Ward	West Ward	Queens Ward	Kings Ward
November 1937	1	—	—	—	—	—
December 1937	7	2	6	9	1	3
January 1938	—	2	4	2	3	2
February 1938	1	1	1	1	1	2
Totals	9	5	11	12	5	7

These two tables give an indication of the widespread distribution of the condition and a hint that the total incidence was considerably larger than notification indicated.

COMMENTARY.

The number of cases investigated was only a relatively small proportion of the total affected, and the limitations that such a small number impose upon deductions regarding the mode of spread of the disease is considerable, in spite of the fact that the severer cases of the disease as these 47 were are perhaps more likely to be clear cut in their etiology as well as their symptomatology than a random sample of the same number. Positive conclusions regarding the mode of spread based on this number could only be drawn with reserve, although the absence of any trend in the figures can perhaps be used with more confidence.

It seemed obvious in the first place that a large incidence of disease over a fairly short period, as this was, depended for its mode of spread upon some vehicle in common use or of wide distribution. Water and milk were therefore the two possible factors first considered. The outbreak was sufficiently widespread to be water-borne, but there was no evidence supporting this. Water samples from the town's supply were satisfactory throughout. A coincidence, also, helped in the exculpation of water. In connection with a matter unrelated to this epidemic or to the quality of the supply, the dose of chlorine in the water was increased on 29-11-37, (before the epidemic was established) to a figure considered sufficient to inhibit organisms of the dysentery type. Milk did not appear to be implicated either. The 47 cases occurred among the customers of 17 milkmen. The distribution of these was only significant of the popularity of the various dairies. The milks consumed by patients were of all qualities—T.T., Grade A, Pasteurised and ungraded. In one case only tinned milk was employed at the material time.

The role of other foodstuffs in the spread can be spoken of less confidently. The probability is that the vehicle responsible for the spread was some article in the diet and possibly some vegetable or fruit eaten raw. The difficulties in investigating the part that these foods played were considerable and no useful conclusions could be drawn. Thirteen cases of dysentery occurred in children under 3 years of age, eleven of which were the first cases in their particular households. No raw fruit or vegetable, except orange in the case of two and orange, apple and banana in the other nine, were given as entering into the dietary. Maternal circumspection in answering questions about their children's care no doubt limited this range. Histories regarding this class of foodstuffs were always vague, however. It was, impossible, for instance, to decide a day or two after consumption whether apples were home-grown or imported, a point of some importance.

Multiple cases in one household were observed to occur ten times in this series. Spread appeared to be by contact in most of these instances, as there were none in which the disease attacked two persons simultaneously, and there were several examples of a whole household being affected serially. Spread by this means, however, was so slow as to negative this as a major factor in determining the outbreak. In one family of six persons spread through the household took a month. Among the 49 members of families with a notified case of disease, 24 persons had symptoms, but in only two of these last was the illness sufficiently serious to require medical aid and most amounted to nothing but a mild disturbance that would have passed unnoticed if attention had not been drawn to it. The average interval between the onset of these cases was 7 days with a minimum of 3 days and a maximum of 14. In two cases where the patients first affected were removed and isolation of contacts was therefore efficient, the intervals between removal and the occurrence of symptoms in the next victims were 3 days and 5 days.

ISOLATION HOSPITAL, GORSE HILL,
SWINDON.

ANNUAL REPORT

From 1st April, 1937, to 31st March, 1938.

ISOLATION HOSPITAL.

The Isolation Hospital year runs from the 1st April to the 31st March. There was no change during the year in the policy of the hospital, nor in the area that it serves. Nor was there any structural alteration, but a proposal to increase the accommodation by the erection of a cubicle block was passed by the Council and this work will be put in hand during the present year. There was likewise no change in the Bacteriological Department, nor in the Ambulance Service.

During the year 100 swabs were examined on behalf of the hospital and 313 on behalf of Swindon borough and the surrounding rural sanitary authorities. Also, the following journeys were made by the ambulances :—

Transport of infectious cases	....	....	213
Transport of non-infectious cases	....	....	812
Transport of bedding for disinfection and laundry articles	....	....	343

AIR RAID PRECAUTIONS.

In 1937 Air-raid Precautions came to the front and the function of the local hospitals in connection with them received consideration. In the preliminary medical scheme presented by the Medical Officer of Health the Isolation Hospital at Gorse Hill was proposed as the centre of hospital administration for these reasons: The Isolation Hospital at Gorse Hill is the only hospital in the town which is of sufficient size and has sufficient ground to take on any emergency function. It is the only hospital in the town in which there is any available accommodation of any extent. Generally, it is perfectly simple to find immediate accommodation up to about 50 at an hour's notice, for very rarely indeed are all the major wards in use and the town's stock of emergency bedsteads and bedding are housed at the Isolation Hospital. This matter will be pursued in the coming year. The provision made for dealing with possible air-raids is also available for other possible emergencies calling instantly for a large number of beds, such as an extensive fire, or a railway accident. The whole machinery for dealing with the hospital side of such catastrophes was thought out many years ago and can be brought into action by a telephone communication to the Matron.

HOSPITAL SERVICE.

The number of new admissions during the year 1st April, 1937, to 31st March, 1938, was 232, which is the lowest number since the hospital was re-organised in 1923 and, so far as our records extend, the lowest in any year, with the exception of 1920-21.

On the 1st April, 1937, 16 patients remained in hospital, so that altogether 248 cases were under treatment during the year.

Of these :— 202 were discharged cured.

21 died.

1 was transferred to another hospital.

24 remained in hospital at the end of the year 31/3/38.

The 248 cases arranged according to the final diagnosis :—

Diphtheria	....	....	....	....	28
Diphtheria and Whooping Cough	....	....	....	....	1
Diphtheria carriers	....	....	....	....	5
Scarlet Fever	....	....	....	....	74
Scarlet Fever and Whooping Cough	....	....	....	....	1
Scarlet Fever and Mumps	....	....	....	....	1
Scarlet Fever and Chickenpox	....	....	....	....	1
Pneumonia	....	....	....	....	37
Erysipelas	....	....	....	....	11
Measles	....	....	....	....	20
Tonsillitis	....	....	....	....	19
Mumps	....	....	....	....	1
Poliomyelitis	....	....	....	....	2
Cerebro-spinal Meningitis	....	....	....	....	1
Puerperal cases	....	....	....	....	18
Babies with mothers	....	....	....	....	7
Ophthalmia neonatorum	....	....	....	....	1
Mother with baby	....	....	....	....	1
? Foot and mouth disease	....	....	....	....	1
Undiagnosable pyrexia	....	....	....	....	1
Meningitis	....	....	....	....	1
Dysentery	....	....	....	....	2
Acholia	....	....	....	....	2
Catarrhal Jaundice	....	....	....	....	1
Cellulitis	....	....	....	....	1
Psycho-neurosis	....	....	....	....	2
Impetigo	....	....	....	....	3
Urticaria	....	....	....	....	2
Marasmus	....	....	....	....	1
Ill-nutrition	....	....	....	....	1
Foreign body in larynx	....	....	....	....	1

The 232 cases admitted during the year were chargeable to the following local authorities :—

Public Health Acts :—

Swindon Borough	....	....	....	142
Highworth Rural District	....	....	....	41
Cricklade and Wootton Bassett Rural District	....	....	....	15
Malmesbury Rural District	....	....	....	1
Wilts County Council	....	....	....	8

Maternity & Child Welfare (Puerperal & O.N. Cases).

Borough of Swindon	....	....	....	15
Wilts County Council	....	....	....	10

Though the number of admissions to the hospital was the lowest but one in my experience, the severity of the cases was greater than I have ever known and their complicated nature made the work of the hospital during the year more onerous and anxious than in many years where twice as many patients were under treatment.

The number of deaths, namely 21, gives a fatality of nearly 10%, which is much higher than I have known previously. It is usual in fever hospital practice for the severity of the cases to vary inversely with the number of admissions.

The 21 deaths that occurred in the hospital, including two that occurred in the ambulance, were :—

7 pneumonia.

6 diphtheria.

1 streptococcal septicaemia following abortion.

1 erysipelas spreading to the frontal sinus.

1 meningitis of unknown causation.

1 poliomyelitis.

1 feeble infant who had ophthalmia neonatorum.

1 streptococcal tonsillitis brought in moribund.

1 cerebro-spinal meningitis.

1 case of a foreign body in the larynx. (This child died within a few hours of admission and was the subject of an inquest. He had been admitted as a laryngeal diphtheria, but had not that disease. A foreign body was suspected, but could not be found during life. On post-mortem examination it was obvious why the body could not be found. It was a splinter from a cedar pencil, a quarter of an inch long. Subsequently we recovered the pencil and found that the splinter which had lodged in the child's larynx actually fitted a deficiency near the point of the pencil. Presumably the child must have been sucking the pencil and inhaled the splinter.)

DIPHTHERIA.

The number of cases of diphtheria treated during the year was only 34 and of these 5 were carriers and do not count. So actually there were only 29 clinical diphtheria. One of these was complicated with whooping-cough and another occurred in a child who was an inmate of a general hospital and was suffering from nephritis. Strictly speaking we only treated 28 diphtherias, for one of the cases admitted to hospital was dead on admission. In addition to this, one was admitted moribund and died the same day and four others died of heart failure. Two of the cases which developed clinical diphtheria had been immunised. Both appeared to be genuine clinical diphtheria of very mild type, but in neither case was it possible to isolate the corynebacterium, though repeated attempts were made to do so. A characteristic of the diphtheria in the year under review was a sharp division between the fatal and the non-fatal cases, for the latter were all very mild and free from complications. The fatality rate—5 deaths out of 28 cases—is high, so we may be thankful that the incidence of the disease in Swindon and the neighbourhood was very low.

SCARLET FEVER.

There were 77 cases of scarlet fever under treatment during the year. All recovered and the disease generally was exceedingly mild. One case left over from last year developed rheumatic fever, with endocarditis, but recovered completely. There were 4 cases of surgical scarlet fever, one following a dog bite on the lip, one following a motor-car accident and two following burns.

The complications were few in number. One case developed violent delirium and jumped out of the window. However, he came to no harm. One case developed double otorrhoea, one mastoiditis and one single otorrhoea. All these left the hospital completely cured. A case of particular interest was a young man who was sent in suffering from an abscess of the prepatellar bursa, with a typical scarlet fever reaction, but neither from the abscess nor from his throat or nose could streptococci be recovered. From both sites the only organism that could be grown was staphylococcus aureus. This raises the question whether staphylococcus aureus can give the clinical scarlet fever syndrome.

THE PNEUMONIAS.

The 37 cases treated in hospital during the year were a curious collection, because they included three types of pneumonia with which I am unfamiliar. Of the ordinary croupous variety (the typical lobar pneumonia of textbooks) there were 10 cases with

one fatality. I am told that in London and the great cities this typical form of pneumonia is now seen but rarely, but it is still common in Swindon, though less so than formerly. There were six cases of pneumonia of a type which is quite new to me, characterised by jaundice, an unfavourable blood-count and a favourable termination. I am quite familiar with the form of pneumonia resembling this except that it is invariably fatal; but all the six cases that we had last year recovered. They were grouped together in the Spring of 1937. Another new type of pneumonia, of which we had five cases with two deaths, occurred later in the year. This group was characterised by violent maniacal delirium. There was only one case of the June epidemic type, which recovered. There was one case of heliotrope pneumonia, which was fatal. This type is characteristic of influenza with secondary infection with Pfeifer's haemophilus. In this case I could not recover the haemophilus and it occurred at a time when there was no influenza. There were 10 cases of whooping-cough pneumonia with two fatalities. One case died in the ambulance, so I cannot tell to what type it belonged. One case was a pneumonia secondary to chronic asthma, which was fatal. One was a case of chronic pneumonia which had come on after an acute attack which had been treated in the hospital the previous year. This case recovered. Lastly, there were two cases of pleuro-pneumonia, both of which left the hospital apparently cured, but one died some months later from suppuration of the lung.

Unfortunately, I have not got the machinery available for typing pneumococcus, so that I am unable to correlate the various clinical types of pneumonia with the varieties of the causal parasite, though I feel certain that this will be done eventually. In England we have been woefully behind-hand in studying the epidemiology of the pneumonias, but a certain amount of work on this subject has been done in Scotland. In America a very determined effort is being made to unravel the problems of the pneumonias and rid us of the toll they take of us. In temperate climates the pneumonias cause many more deaths than all other acute infections put together, yet up to the present they have received little attention. From the records that we have in Swindon it seems that various types of pneumonia occur in epidemics which are local and topical and it is probable that these are due to new mutations of the pneumococcus, for it is known that the pneumococcus does mutate and that the disease-producing varieties are derived from a harmless parasite which is nearly universal in distribution. Some types of pneumonia are amenable to serum treatment, but so far as my experience goes only in a few types is serum both needed and efficient. I have seen several extraordinary recoveries after the use of serum in cases that appeared to be hopeless, but it must be used with discrimination, for it very commonly gives rise to a most alarming reaction which is sometimes fatal. For

years I have been working out the cytological changes which occur in the blood of pneumonias and from this I maintain that in all known types of pneumonia it is possible to make an accurate prognosis and separate the cases into those which are certain to recover if they are un-treated and those which will certainly die unless they are treated. This does not, however, hold with new types of pneumonia, probably from lack of experience in reading the blood picture. For instance, I was unable to discriminate between the benign jaundice type which we encountered in the Spring of 1937 and the malignant jaundice type which we had in epidemic form some years ago. There are differences in the blood picture, but up to the present I have been unable to evaluate them.

PUERPERAL MORBIDITY.

There are 19 names on this list, but as one was a re-admission and another one had never been pregnant, there were actually only 17 cases treated during the year. Of these 9 were abortion and 8 pyrexias following delivery of viable children. Of the 9 abortions all but two had notifiable pyrexia. One was a simple abortion without complication ; one was a case of retained placenta which required manual removal and the other seven were septic. One of the last appeared to be a natural pathological abortion due to whooping-cough, the remaining six were open to suspicion. Of the septic cases, four were due to infection with haemolytic streptococci. Classified according to Dr. M. Thomas's clinical grouping, one of these belonged to Group 4 and was fatal, two belonged to Group 3 and one to Group 2. Of the pyrexias following normal delivery, one was a case of phlebitis. Four were due to infection with haemolytic streptococci. One belonged to Group 3 and the remainder to Group 2. All recovered.

Taking them altogether and grouping them according to Dr. M. Thomas's classification, there was one Group 1, eight Group 2, four Group 3 and one Group 4. The only fatal case was one of streptococcal septicaemia following abortion. This case was the subject of an inquest. Two cases were associated with very severe haemorrhage and four with retention of the placenta.

Though the results were satisfactory, many of the cases caused more than average anxiety. When the notes are reviewed two matters stand out clearly. First the number of dangerous abortions and secondly the benignancy of the prevailing types of haemolytic streptococcus. In several cases the streptococci were typed out for us at the Ministry of Health. They all belonged to high numbers in the series which are known to be less pathogenic than the low numbers. This comparative low virulence of the infecting organism is the explanation of the remarkably good results obtained in some of the cases which on clinical grounds had a grave outlook.

CROSS INFECTION.

The only troubles we had with cross infection during the year were from the admission of one case of diphtheria with whooping-cough who infected three other diphtheria patients with whooping-cough, and the admission of a scarlet fever case incubating chickenpox which gave rise to four other cases of chickenpox, three of which, curiously enough, were the same children who had been infected with whooping-cough. Except by cubicle isolation of all admissions it is difficult to see how either of these cross infections could have been prevented, for an incubating chickenpox cannot be diagnosed until the eruption appears and its period of maximum infectivity is apparently immediately before the eruption appears, and whooping-cough when it is complicated with anything else has no characteristic by which it can be detected.

RETURN CASES.

There were no return cases during the year under review.

DUNSTAN BREWER,

Medical Officer of Health and
Medical Supt. Isolation Hospital.

Public Health Department,
Civic Offices,
SWINDON.

BOROUGH OF SWINDON.

GENERAL STATISTICS.

Area (acres)	....	....	....	6062
Population : Census 1931	....	....	....	62401
Estd. middle of 1937	....	....	....	60170
Number of inhabited houses (1937)	....	....	....	17382
Rateable Value (General Rate)	....	....	....	£353,642
Sum represented by a penny rate	....	....	....	£1,270

EXTRACTS FROM VITAL STATISTICS OF THE YEAR.

	Total	M.	F.			
Live Births	{ Legitimate 723 { Illegitimate 25	364	359	9	Birth Rate	.... 12.43

Stillbirths : Legitimate	23	14	9	Rate per 1,000 total (live and still) births 29.83
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Deaths	673	388	285	Death Rate 11.18
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Number of women dying in, or in consequence of childbirth—

	Deaths	Rate per 1,000 total (live and still) births
From Puerperal sepsis	.... 2	2.59
From Other puerperal causes	.... 5	6.49
Total	.... 7	9.08

Death Rate of Infants under one year of age :—

All infants per 1,000 live births	48.13
Legitimate infants per 1,000 legitimate live births	48.41
Illegitimate infants per 1,000 illegitimate live births	40.

Deaths from Cancer (all ages)	....	96
„ Measles (all ages)	....	—
„ Whooping Cough (all ages)	....	2
„ Diarrhoea (under 2 years of age)	....	2

INFECTIOUS DISEASE.

Table showing the number of cases notified in the Borough during the year 1937.

Disease	Cases notified at various ages. (Years)										Total cases notified	No. of cases admitted to Hospital.	No. of Deaths.
	Under 1	1-2	2-3	3-4	4-5	5-10	10-15	15-20	20-35	35-45	45-65	65 and upwards	
Smallpox	...	...	3	2	5	24	11	1	3	2	...	...	...
Scarlet Fever	...	...	...	2	3	10	10	1	2	...	1	...	...
Diphtheria	...	...	2	2	...	...	...	...	...	...	...	...	3
Enteric Fever (including paratyphoid)	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Pyrexia	...	...	...	...	...	...	...	...	41	10	...	...	...
Pneumonia	6	5	3	3	2	9	4	1	19	19	19	22	1
Erysipelas	...	...	...	...	...	1	...	...	2	3	7	3	30
Cerebro-spinal Fever	1	...	...	...	...	3	...	...	...	...	...	...	1
Polio-myelitis	...	...	1	...	...	...	...	...	...	...	...	...	1
Polio-encephalitis	...	...	...	...	...	...	...	...	...	...	...	...	...
Encephalitis Lethargica	...	...	...	...	...	...	...	...	...	...	...	...	...
Dysentery	5	3	1	1	1	...	1	2	11	3	2	...	...
Ophthalmia Neonatorum	3	...	...	...	...	...	...	...	1	...	1	...	1
Malaria	...	...	...	...	...	...	...	...	...	...	...	...	...
TOTALS	15	8	10	8	11	47	26	5	79	37	30	25	38

TABLE SHOWING MONTHLY INCIDENCE OF INFECTIOUS DISEASES AND THE NUMBER OF DEATHS
DURING 1937.

DISEASE.	NUMBER OF CASES.												Total	No. of Deaths.
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.		
Smallpox	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever	2	5	2	2	5	6	2	...	3	4	9	11	51	...
Diphtheria	4	...	1	3	6	2	1	2	3	3	4	2	31	3
Enteric Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...
(including paratyphoid)														
Puerperal Pyrexia	4	9	2	5	3	9	1	2	3	6	1	6	51	1
Pneumonia	32	17	14	7	3	4	4	1	7	5	5	13	112	30
Erysipelas	1	...	4	3	...	1	1	...	2	2	2	...	16	1
Cerebro-spinal Fever	...	...	...	...	...	...	...	...	...	...	...	1	1	1
Polio-myelitis	...	...	...	...	...	...	...	1	1	1	1	...	4	...
Polio-encephalitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Encephalitis Lethargica	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dysentery	...	...	...	1	...	...	...	...	...	...	1	28	30	...
Ophthalmia Neonatorum	...	...	...	...	...	...	1	...	...	1	...	1	3	1
Malaria	...	...	...	...	...	...	1	...	...	...	...	1	2	1
TOTALS	43	31	23	21	17	22	11	6	19	22	23	63	301	38

TUBERCULOSIS, 1937.

Age Periods	NEW CASES				DEATHS			
	Respiratory		Non-Respiratory		Respiratory		Non-Respiratory	
	M	F	M	F	M	F	M	F
Under 1 year	1	....	....	....	1	....	....	....
1—5 ....	....	1	2	....	....	....	....	....
5—10 ....	....	1	3	1	....	....	....	....
10—15	3	2	1	3	....	....	2	....
15—25	9	6	4	2	3	2	1	....
25—35	11	2	2	1	2	2	1	....
35—45	3	4	2	....	4	2	1	....
45—55	3	1	....	....	3	....	....	....
55—65	5	1	1	1	1	....	....	....
65 and upwards	1	....	....	....	1	....	1	....
TOTALS	36	18	15	8	15	6	6	....

DEATHS FROM TUBERCULOSIS, 1937.**TABLE SHOWING WHEN CASES WERE NOTIFIED.**

When Notified.	Respiratory		Non-Respiratory	
	Males.	Females	Males.	Females
One year or more before death	4	4	2	....
Less than one year and more than 6 months before death	2	2	....	....
Less than six months and more than two months before death	4	....	....	....
Less than two months before death	3	....	1	....
At or immediately before death	2	....	3	....
Unnotified (Cases who died outside the Borough & never notified to Swindon).	....	....	....	....
TOTALS	15	6	6	....

The Registrar General accredits us with one female death from non-pulmonary tuberculosis. I am quite unable to trace this case, for the total number of deaths given us by the Registrar General corresponds with that of our registers. Presumably this death accredited to non-pulmonary tuberculosis in the general register must be included under another cause in our local register. I have examined all the death certificates for females which were registered in 1937 and I can find none in which non-pulmonary tuberculosis is mentioned. As the age of this doubtful case is not given by the Registrar General I have excluded it from the above tables. It increases our total deaths from all tuberculosis from 27 to 28, giving us a mortality of 0.47.

Comparative statement showing the number of notifications received of the various forms of Tuberculosis and the Death Rates resulting from each form of the disease for the years 1918-1937.

	1937	1936	1935	1934	1933	1932	1931	1930	1929	1928	1927	1926	1925	1924	1923	1922	1921	1920	1919	1918
No. of cases notified (all forms)	77	69	65	73	79	88	80	86	98	114	102	94	91	111	117	103	98	97	73	116
Respiratory Tuberculosis	54	52	40	42	53	62	52	41	57	69	70	56	66	75	75	68	63	72	51	86
Deaths from Respiratory Tuberculosis	21	21	26	28	35	41	40	37	23	40	45	30	42	42	48	59	42	55	44	66
Deaths from Tuber. Meningitis	3	3	1	5	1	5	3	3	3	6	1	8	5	4	12	6	11	8	8	11
Deaths from other forms of the disease	4	3	4	4	3	7	3	12	1	2	9	3	4	7	7	6	12	6	8	11
Total deaths from Tuberculosis	28	27	31	37	39	53	46	52	27	48	55	41	51	53	67	71	65	69	60	88
General Death Rate for all forms of Tuberculosis	0.47	0.45	0.51	0.61	0.64	0.85	0.73	0.84	0.44	0.82	0.96	0.71	0.89	0.93	1.19	1.27	1.17	1.28	1.16	1.74
Death Rate for Respiratory Tuberculosis	0.35	0.35	0.43	0.46	0.57	0.66	0.64	0.60	0.37	0.68	0.78	0.5	0.73	0.74	0.85	1.05	0.75	1.02	0.85	1.30

TABLE SHOWING THE DISTRIBUTION OF INFECTIOUS DISEASE IN
THE VARIOUS WARDS OF THE TOWN DURING THE YEAR 1937.

DISEASE.	WARD.						TOTAL.
	North	South	East	West	King's	Queen's	
Diphtheria	6	2	14	5	2	2	31
Scarlet Fever	15	4	11	11	8	2	51
Pneumonia	23	24	16	19	17	13	112
Pulmonary Tuberculosis	10	8	8	12	9	7	54
Other forms of Tuberculosis	11	2	2	4	4	....	23

INFANT MORTALITY IN THE SIX WARDS OF THE BOROUGH.

WARD.	NO. OF BIRTHS.	NO. OF INFANT DEATHS.	INFANT DEATH RATE PER 1,000 LIVE BIRTHS.
NORTH	170	10	58.82
SOUTH	94	4	42.55
EAST	139	6	43.16
WEST	153	3	19.60
KING'S	98	8	81.63
QUEEN'S	94	5	53.19
Total for Borough	748	36	48.13

**REVIEW OF THE COMPARATIVE VITAL AND MORTALITY
STATISTICS FOR THE BOROUGH OF SWINDON, TOGETHER
WITH THOSE FOR ENGLAND AND WALES FOR THE
YEARS 1901 TO 1937 INCLUSIVE.**

Year	BIRTH RATE		DEATH RATE		INFANT MORTALITY RATE		Illegitimate Death Rate
	Swindon	England and Wales	Swindon	England and Wales	Swindon	England and Wales	
1901	30.6	28.5	11.8	16.9	102.9	151	—
1902	28.3	28.5	12.7	16.3	104.7	133	—
1903	29.5	28.5	11.27	15.5	106.9	132	—
1904	30.0	28.0	12.49	16.3	111.2	145	—
1905	28.4	27.3	11.2	15.3	95.4	128	—
1906	29.4	27.2	9.9	15.5	86.2	132	—
1907	28.8	26.5	12.3	15.1	91.8	118	—
1908	28.9	26.7	11.8	14.8	101.5	120	—
1909	26.5	25.8	10.8	14.6	78.2	109	—
1910	23.4	25.1	9.7	13.5	86.8	105	—
1911	21.6	24.3	10.9	14.6	103.1	130	—
1912	23.4	23.9	10.3	13.3	76.3	95	—
1913	23.39	24.1	12.08	13.8	86.4	108	—
1914	22.5	23.8	11.5	14.0	73.7	105	—
1915	21.16	21.9	12.83	15.7	67.7	110	—
1916	18.9	20.9	11.3	14.4	72.4	91	—
1917	15.5	17.8	12.25	14.4	88.6	96	—
1918	16.53	17.7	15.13	17.6	81.3	97	129.63
1919	16.86	18.5	11.97	13.8	83.9	89	79.52
1920	23.25	25.4	11.64	12.4	69.0	80	122.44
1921	20.27	22.4	9.58	12.1	67.5	83	102.56
1922	18.98	20.6	12.17	12.9	60.5	77	121.95
1923	17.77	19.7	9.27	11.6	53.2	69	83.33
1924	17.11	18.8	10.78	12.2	63.01	75	192.30
1925	16.56	18.3	11.09	12.2	60.5	75	52.63
1926	17.09	17.8	10.67	11.6	47.95	70	193.54
1927	14.52	16.7	11.16	12.3	46.98	69	107.14
1928	15.63	16.7	9.92	11.7	36.26	65	51.28
1929	13.98	16.3	10.96	13.4	47.29	74	32.26
1930	15.66	16.3	10.77	11.4	62.82	60	157.89
1931	14.51	15.8	10.88	12.3	56.04	66	136.36
1932	14.31	15.3	11.68	12.0	52.99	65	37.04
1933	12.48	14.4	11.06	12.3	52.22	64	66.67
1934	12.66	14.8	11.11	11.8	55.84	59	115.38
1935	12.32	14.7	10.50	11.7	47.04	57	107.14
1936	13.13	14.8	12.15	12.1	46.84	59	88.24
1937	12.43	14.9	11.18	12.4	48.13	58	40

BOROUGH OF SWINDON.

CAUSES OF DEATH, 1937.

(Registrar-General's Official Returns).

CAUSES.	Males.	Females	Total.
Whooping Cough .....	....	2	2
Diphtheria	1	2	3
Influenza	7	6	13
Encephalitis Lethargica	1	....	1
Cerebro-spinal fever .....	....	1	1
Tuberculosis of Respiratory System	15	6	21
Other Tuberculosis	6	1	7
Syphilis	2	1	3
General paralysis of insane, etc.	4	....	4
Cancer	55	41	96
Diabetes	6	2	8
Cerebral haemorrhage	21	18	39
Heart disease	105	90	195
Aneurysm	1	....	1
Other circulatory disease	17	12	29
Bronchitis	12	14	26
Pneumonia	26	4	30
Other respiratory disease	2	1	3
Peptic Ulcer	4	1	5
Diarrhoea etc. (under 2 years) .....	....	2	2
Appendicitis	2	2	4
Cirrhosis of liver	2	....	2
Other liver diseases	1	1	2
Other digestive disease	3	3	6
Acute and chronic nephritis	15	7	22
Puerperal sepsis .....	....	2	2
Other puerperal disease .....	....	5	5
Congenital Debility, Premature Birth, etc.	17	7	24
Senility	16	20	36
Suicide	4	3	7
Other violence	11	11	22
Other defined diseases	30	19	49
Ill defined causes	2	1	3
ALL CAUSES	388	285	673

BOROUGH OF SWINDON.

INFANT MORTALITY.

1937. *Nett deaths from stated causes at various ages under
One Year of Age.*

COMPILED FROM THE OFFICIAL REGISTRATIONS.

CAUSE OF DEATH.	Under 1 week	1—2 weeks	2—3 weeks	3—4 weeks	Total under 1 month.	1—3 months	3—6 months	6—9 months	9—12 months	Total Deaths under 1 year.
All Causes—										
Certified	17	2	...	1	20	3	3	6	4	36
Uncertified
Measles
Whooping-cough	1	1
Diphtheria
Influenza	1	...	...	1
Tuberculosis of nervous system
Tuberculosis of Intestines and Peritoneum
Acute Pneumonic Tuberculosis	1	...	1
Syphilis
Meningitis
Convulsions
Bronchitis
Pneumonia	1	1	...	1	2	...	4
Other Respiratory Diseases
Inflammation of the Stomach
Diarrhoea and Enteritis	1	1	1	3
Hernia, Intestinal Obstruction
Congenital Malformations	3	...	...	...	3	1	...	...	2	6
Congenital Debility and Sclerema	1	...	...	1	1	...	...	...	2
Icterus	1	...	...	1	...	...	...	...	1
Premature Birth	12	...	...	...	12	...	...	...	...	12
Injury at Birth	2	...	...	...	2	...	...	...	...	2
Disease of Umbilicus
Atelectasis
Suffocation
Multiple abscesses	1	...	...	...	1
Otitis media	1	...	1
Other violence	1	...	1
TOTALS	17	2	...	1	20	3	3	6	4	36

**LIST OF HOSPITALS PROVIDED OR SUBSIDISED BY
THE LOCAL AUTHORITY OR BY THE COUNTY COUNCIL.**

TUBERCULOSIS.	Two beds at Winsley Sanatorium, near Bath, provided by the local authority. The Wilts County Council has two sanatoria for the treatment of tuberculosis; one at Winsley for early cases and the other at *Harnwood near Salisbury, for advanced cases.
MATERNITY.	A Maternity Home of 24 beds provided by the local authority.
CHILDREN.	Nil.
FEVER.	A fever hospital of 70 beds provided by the local authority.
SMALLPOX.	A Smallpox Hospital provided by the Wilts County Council.
VENEREAL DISEASES.	A hospital with 6 beds provided by the Wilts County Council.
ORTHOPAEDIC.	Use of beds in Bath Orthopaedic Hospital.

* Extract from County Medical Officer's Annual Report, 1937.

This Hospital is not now exclusively reserved for advanced cases. As far as possible, all definite cases of pulmonary tuberculosis throughout the County requiring institutional treatment are admitted in the first instance to Harnwood Hospital. After a preliminary period of rest and observation there, cases suitable for Sanatorium Treatment are transferred to Winsley Sanatorium, the more advanced cases being retained at Harnwood.

Maternity and Child Welfare	....	61, Eastcott Hill	....	Mondays, Wednesdays and Fridays 2 p.m. to 4.30 p.m.	Swindon Corporation
Maternity and Child Welfare	....	Pinehurst Clinic, Beech Avenue	....	Wednesdays 2 p.m. to 4.30 p.m.	"
Maternity and Child Welfare	....	St. Barnabas' Church Hall	....	Tuesdays, 2 p.m. to 4 p.m.	"
Maternity and Child Welfare	....	Cricklade Road Methodist School, Romsey Street	....	Thursdays, 2 p.m. to 4 p.m.	"
Ante-Natal Clinic	....	37, Milton Road	....	Thursdays, 2 p.m. to 4 p.m. Mondays, 2 p.m. (G.W.R. cases) 6 to 7 p.m.	"
Consultation Ante-Natal Clinic	....	Maternity Home, Kingshill	....	Tuesdays, 2 p.m. (Medical Officer) 6 p.m. (Matron's Clinic)	"
Minor Ailments	....	61, Eastcott Hill	....	Thursdays (G.W.R. cases) and Fridays, 2 to 4.30 p.m.	"
Minor Ailments	....	Pinehurst Clinic, Beech Avenue	....	Second & Fourth Wednesdays in each month at 2.30 p.m.	"
Dental Clinic	....	Wesley Schools, Farnsby Street	....	Every morning 9 to 11 o'clock Daily 9.30 a.m. to 12.30 p.m., and 2 p.m. to 5 p.m.	"
Dental Clinic	....	Pinehurst Clinic, Beech Avenue	....	Saturdays 10 a.m. to 12.30 p.m. Daily 9.30 a.m. to 12.30 p.m. and 2 p.m. to 5 p.m. (Weds. excepted)	"
Nose, Throat and Ear Clinic	....	61 Eastcott Hill	....	Saturdays 10 a.m. to 12.30 p.m.	"
Eye Clinic	....	"	....	Mondays, 2 p.m. to 5 p.m.	"
Ringworm Clinic	....	"	....	Tuesdays, 2 p.m. to 4.30 p.m.	"
Medical Officer's Special Clinic	....	"	....	Thursdays, 2 p.m. to 5 p.m.	"
X-Ray Clinic	....	"	....	Thursdays, 2 p.m. to 5 p.m.	"
Electrical Treatment (General)	....	"	....	Thursdays, 2 p.m. to 5 p.m.	"
Electrical Ionization Clinic	....	"	....	Wednesdays, 2 p.m. to 4 p.m.	"
Observation Clinic	....	"	....	Fridays, 2 p.m. to 4.30 p.m.	"
Tuberculosis Clinic	....	"	....	Saturdays, 9.30 a.m. to 12 noon	"
Venereal Diseases Clinic	....	Tuberculosis Dispensary, Milton Road	....	Thursdays, 10 a.m. to 3 p.m.	Wilts County Council
	....	Isolation Hospital, Gorse Hill	....	Men—Wednesdays, 7.0 to 8.30 p.m. Fridays, 6 p.m. to 7.30 p.m. Women and Children:— Mondays, 5 p.m. to 6.30 p.m. Fridays, 2 p.m. to 3.30 p.m.	"
Orthopaedic Clinic	....	Isolation Hospital Grounds, Gorse Hill	....	Tuesdays, 2 p.m. to 3.30 p.m.	Voluntary Association

AMBULANCE FACILITIES.

- | | |
|---|---|
| (a) For Infectious Diseases. | } Three Motor Ambulances, giving
a 24 hour service, are supplied by
the Swindon Town Council. |
| (b) For non-infectious and
accident cases. | |

**LIST OF LOCAL ACTS, SPECIAL LOCAL ORDERS AND
GENERAL ADOPTIVE ACTS IN FORCE IN THE DISTRICT.****LOCAL ACTS AND ORDERS.**

Swindon Water Act, 1894.

Swindon New Town Electric Lighting Order, 1895.

Swindon (Water) Orders of 1902 and 1919.

The Swindon Corporation Act, 1904.

Swindon Corporation (Wilts and Berks Canal Abandonment)
Act, 1914.

The Swindon Order, 1923.

The Swindon Order, 1925.

Swindon Corporation Act, 1926.

The Swindon Order, 1927.

The Swindon (Extension) Order, 1928.

The Swindon Electricity (Extension) Special Order, 1929.

Public Works Facilities Scheme (Swindon Corporation) Con-
firmation Act, 1931.

The Swindon Roads (Restriction) Order, 1935.

ADOPTIVE ACTS IN FORCE.

Date of Adoption.

The Public Health Acts Amendment
Act, 1890.

11th Nov., 1890.

Infectious Diseases (Prevention) Act,
1890

11th March, 1902.

The Museums and Gymnasiums Act,
1891 (so far as it relates to
museums)

6th June, 1905.

The Local Government and Other
Officers' Superannuation Act, 1922

1st May, 1924.

THE PUBLIC HEALTH ACTS AMENDMENT ACT, 1907 :—

Part III., Secs. 36, 37, 49, 50, and 51

Part IV., Secs. 62, 64 and 65

Part VII., Sec. 85.

Part X., Sec. 93.

Part VI.

7th Dec., 1926.

20th July, 1936.

THE PUBLIC HEALTH ACT, 1925. :—

Part II. (except Secs. 20, 24 and 29).

Part III.

Part IV.

Part V.

Part VI.

7th Dec., 1926.

20th July, 1936

This list refers to the position prior to the coming into force of the Public Health Act, 1936, on October 1st, 1937. The Public Health Act, 1936, repeals most of the adoptive acts.

BOROUGH OF SWINDON.

ANNUAL REPORT

OF THE

Chief Sanitary Inspector

F. H. BEAVIS

For the Year 1937.

To the Chairman and Members of the Health etc., Committee.

LADIES AND GENTLEMEN,

I have the honour of submitting my twelfth Annual Report dealing with the work carried out by the Sanitary Department during the year ended 31st December, 1937.

Appended hereto will be found the tables giving full particulars of the inspections made during the year, in conformity with the requirements of the Ministry of Health.

There was only one change in the staff of the Sanitary Department during the year. This occurred when Mr. R. N. Hughes, who had been an Assistant Sanitary Inspector here for close upon six years, obtained an appointment as Sanitary Inspector to the Cirencester R.D.C., and left the service of the Corporation on the 30th April. Your Committee decided to advertise for a successor to Mr. Hughes, and in September Mr. D. L. Wilkinson was appointed and took up his duties on the 18th October. This caused considerable disorganisation in the work of the Department, as it was nearly six months before the successor took up his duties, and it was only by utilising the service of the Temporary Assistant for duties under the Public Health Act that the work of the Department was maintained at its usual level. Consequently, the work under the Housing Act (Overcrowding sections) was practically in abeyance during this period.

MILK SUPPLY.

Milk, as everyone knows, is an important article of diet, and contains all the necessary ingredients for maintaining life. It is also an ideal medium for the growth of bacteria whether harmless or otherwise. Consequently, too much care cannot be taken to ensure that it is pure and wholesome when delivered to the consumer. In Swindon we are fortunate because our milk supply is derived from the agricultural districts surrounding the Borough, so that the inhabitants receive their milk within a few hours of its production in a fresh and wholesome condition. Every effort is made by the Sanitary Department to ensure this, and both producers and distributors are kept under constant supervision so far as it is practicable, whilst cleanliness and precautionary measures are continually being urged upon everyone handling milk.

Most of the milk now being sold in Swindon is "Accredited," and is produced under the conditions set out for "Accredited" producers in the Milk (Special Designations) Order 1936. This, of course, is satisfactory because the object of this Order is the production of clean milk under hygienic conditions.

There were no prosecutions for offences under the Milk and Dairies (Consolidation) Act 1915, during the year. Samples of milk are frequently being taken in the course of delivery, and these samples are sent to Bristol University for bacteriological examination. The results of this examination are set out in the table appended hereto. The source of any sample which is not satisfactory is at once enquired into and immediate steps are taken to ensure an improvement. A working arrangement has been made with the Officers of the districts outside the Borough so that any sample which on examination proves to be unsatisfactory is referred to the Inspector concerned, who takes the necessary steps to ensure cleanliness. This arrangement is working well, and enables us to deal with any cases from outside the Borough. In addition to taking samples, your Inspectors also visit the farms whilst milking is in progress, and by means of the sediment test they can demonstrate to the milkers how clean milk can be produced and the danger from B.Coli reduced to a minimum.

Two farms, two bottling establishments, ten milkshops and three retailers from outside the Borough are licensed for the production or distribution of "Tuberculin Tested" milk. Ten farms, one bottling establishment, five milkshops and five retailers from outside the Borough are licensed for the production or distribution of "Accredited" milk. There are six retailers who are licensed to sell "Pasteurised" milk, and two licences have been issued for the pasteurisation of milk within the Borough.

FOOD SUPPLY.

The work of supervising the people's food supply is of considerable magnitude and tends to increase as time goes on. During the year, 13,792 animals were slaughtered for human consumption within the Borough, and all of these animals were seen by your Inspectors before being offered for sale to the public. This work is of a continuous nature, and much of it must necessarily be done after office hours, but owing to its importance from a public health point of view no effort has been spared to maintain proper supervision, and the work goes on whether it be night or day. Also on public holidays, when other offices are closed, this work is carried on just as usual, and one of your Inspectors is detailed for this duty in order to ensure that proper supervision is exercised.

Fish-frying establishments and small shops where cooked food is sold seem to be on the increase. These premises are kept under constant supervision by your Officers so as to ensure absolute cleanliness, but I am of the opinion that the time has come when all such shops should be licensed or registered by the Local Authority so as to enable us to eliminate the undesirables.

The question of the provision of a public abattoir is now being seriously considered by the Council, and until these deliberations are complete nothing more can be said on the matter. During the year, one of the licensed slaughterhouses ceased to exist, having been demolished to make room for building developments; so that we now have seven registered and eleven licensed slaughterhouses within the Borough. Although these are kept clean and as satisfactory as possible by their various owners, they cannot by any stretch of imagination be said to compare favourably with the hygienic conditions of a public abattoir.

During the year the unsound food amounted to over twenty-six tons. This is an increase on last year's figure, and shows the importance of adequate supervision in order to ensure to the public a wholesome food supply.

Owing to the prevalence of foot-and-mouth disease in the surrounding districts during the latter part of the year, much difficulty was experienced in carrying out the work of meat inspection, because all slaughtering had to be done under licence and usually within twenty-four hours of the issue of the licence. Consequently, your Inspectors were often working to a very late hour at night and also in the early hours of the morning. In spite of this, however, the standard of supervision was strictly adhered to.

During the year one case of suspected swine fever occurred in a registered slaughterhouse and was reported to the Ministry of Agriculture and Fisheries. On investigation, however, the diagnosis was not confirmed.

Appended hereto will be found the tables showing the work carried out under the Public Health (Meat) Regulations 1924.

HOUSING.

The Housing Act of 1935 has now been superseded by the Housing Act of 1936. There is still a considerable amount of work to be done under this Act, much of which is of a continuous nature; because, although the position regarding overcrowding in the Borough is very satisfactory, as will be observed by a perusal of the tables appended hereto, it is necessary to review the situation from time to time in order to ascertain whether any action is called for, and to ensure that the official permitted number for each house is inserted in the rent book. This permitted number can only be given after accurate measurements have been taken, because it has been found that the accommodation provided, even in terrace houses, varies considerably with each house, so that without previous measurement no official figure can be given.

The problem of alternate accommodation for the exceptionally large families which were found to be overcrowded at the first Survey presented much difficulty and caused your Officer a great deal of anxiety. But towards the end of the year a solution was evolved and was accepted by your Committee, whereby some of the large houses could be leased by the Corporation for terms of from five to seven years as and when such houses became available, so as to accommodate these large families and thereby abate the overcrowding. This scheme was put into immediate operation, and by the end of the year one large house had been leased and one of the large families moved into it, whilst negotiations had been commenced for the leasing of other large houses to be used for this purpose.

During the year under review, 3 houses were erected by the Corporation and 512 by private enterprise, making a total of 515 houses erected during the year.

TENTS, VANS AND SHEDS.

There are still two or three caravans in the Borough which are being used for human habitation, but very little trouble was caused by them. There was, however, a great deal of trouble with travelling showmen and others, who stayed for short periods and at various times in a field in the northern part of the Borough. These people usually stayed for two or three nights and then moved on, but in the meantime they had managed to create a serious nuisance and numerous complaints were received. On investigating these complaints it was invariably found that the persons causing the nuisance had left the town and could not be traced, so that no action could be taken against them. This was a very unsatisfactory state of affairs, but it is hoped that in future this will be avoided, and the occupier of the field in question has been approached with this end in view.

THEATRES, CINEMAS, ETC.

There are at present two theatres, six cinemas, one billiard hall and twenty-five premises licensed for dancing, within the Borough, besides which there are five premises licensed for music and singing only. These buildings are regularly visited by your Inspectors so as to ensure their being kept in a cleanly and sanitary condition.

DISINFECTION OF VEHICLES ETC., AT THE CATTLE MARKET.

During December 1937 a serious outbreak of foot-and-mouth disease, which occurred in the surrounding districts, affected the Cattle Market very adversely in that the Market was only open for the sale of animals for immediate slaughter. Consequently

the receipts fell off almost to a vanishing point, whilst facilities for efficient disinfection had to be maintained at all costs, as it was essential that all vehicles bringing live-stock into the Market should be thoroughly disinfected previous to leaving. Consequently a staff had to be kept in attendance for that purpose although the receipts did not amount to one-quarter of the wages paid for labour. It should be clearly understood, however, that the figures shown in the tables appended hereto are not an accurate statement so far as profit and loss is concerned, as they do not include cost of collection, disinfectants, plants, etc., but only give the amounts expended on casual labour. A perusal of this table will show the work carried out during the year at the Market. The scheme which was adopted in 1933, whereby unemployed persons are engaged temporarily on this work, is still operating satisfactorily.

DRAINAGE WORK.

Drainage is another important side of the work of the Sanitary Department. During the year, the drainage systems of 264 houses were either relaid or overhauled. Besides this, the sanitary accommodation at two of the clothing factories (which in one case consisted of obsolete trough closets) was entirely demolished and up-to-date accommodation provided in its stead. Also, the sanitary accommodation at one of the restaurants was completely modernised and more accommodation provided for the use of the customers. All this work was supervised by your Inspectors and took up a great deal of time, but drainage work is of such importance from a public health point of view that too much trouble cannot be taken in seeing that it is efficiently carried out.

RATS AND MICE DESTRUCTION.

1937 proved favourable so far as the rat population was concerned, and during the autumn there was the usual influx of these pests. Owing to the exceptionally mild winter, however, the rodents did not take up their usual winter quarters at the tips, but continued to lay out in hedgerows and other places, which made it very difficult to deal with them, and as a result the number of rats caught was considerably reduced.

During the National Rat Week your Committee again authorised me to engage an extra man to assist in this work, and a special effort was made to destroy as many rats and mice as possible during the Week. Much useful work was accomplished and the extra expenditure was amply justified.

A perusal of the table under this heading will show that 4,652 rats were caught during the year.

GENERAL.

Swindon is still growing, and building estates are being rapidly developed in all the outlying parts of the Borough. Surprising though it may seem, these new houses are being occupied almost before they are completed and yet there are very few of the older houses to let or sell. So that it would seem that the population must be on the increase. This, of course, is very satisfactory and shows that the Borough is in a flourishing condition.

The provision of a proper flushing apparatus to every water-closet is desirable, and this matter is being attended to by your Inspectors. During the year a large number of flushing-cisterns have been installed where previously none had existed. The progress made is satisfactory and the time will soon come when every w.c. will have a proper flushing apparatus.

The privately owned swimming pools within the Borough were kept under constant supervision during the year, and samples of the water were taken periodically. On the whole these samples proved to be satisfactory, excepting that towards the end of the year one of the samples was found to be bad. Steps were immediately taken to rectify this, and on a further sample being taken the water was found to be passable. During the year the Great Western Railway Medical Fund Society spent close upon £7,000 in modernising the swimming baths under their control. The old dressing cabins were removed and new cabins provided at the rear of the baths. The basket system was adopted, whereby each bather receives a basket in which to put his clothes, the basket is handed to an attendant and placed in a separate room until again required. The bacterial purity of the water is ensured as the water in both baths is chlorinated and completely changed every sixteen hours. To accomplish this, 8,000 gallons per hour of pure water, which has been chlorinated in transit, is raised to the required temperature and pumped into the baths. Every bather, before entering the baths, passes through a chlorinated shower and foot-bath. This is very satisfactory, and the Society are to be congratulated on their enterprise and foresight in providing the inhabitants of Swindon with such splendid bathing facilities. The Corporation have also carried out further improvements to the bathing pool at Coate, and a heating plant has been installed by means of which the water in the pool can be raised to any temperature required.

During the year 15 Council houses and 90 other houses were disinfested of bed bugs. Last year the Lawes' Disinfestator Blocks were given a trial and proved to be very satisfactory. Consequently the Blocks are still being used for this purpose.

With regard to applicants for houses on the Housing Estate, the preventative measures adopted by your Committee last year are still being carried out. The method is as follows. Lists of approved applicants are furnished to your Inspector from time to time and each applicant is then visited by him, and if the Inspector thinks it necessary the furniture of the prospective tenant is disinfested in the house previous to removal to a Corporation house. This work is carried out by our own Disinfector, and the Lawes' Blocks mentioned above are used for this purpose.

Section 10 of the Shops Act of 1934 is administered by your Committee, and during the year 1937, five certificates of exemption were granted. These cases are carefully investigated by your Inspector previous to the granting of any certificate. With regard to the ventilation and temperature of shops, over 100 shops were visited during the year, but owing to the exceptionally mild winter no action was necessary.

Free disinfectants are issued by your Committee to the poorer classes of the community, and the method was reorganised in 1933 as certain abuses had crept in. This method is still working satisfactorily, for without refusing any genuine application, the quantity of disinfectant issued has been reduced by about seventy-five per cent.

I am,

Ladies and Gentlemen,

Your obedient Servant,

F. H. BEAVIS,

Chief Sanitary Inspector.

SANITARY STATISTICS, 1937.
TABLE OF NUISANCES RECORDED AND ABATED.

Nature of Complaint.	Not abated 1936	Visited during 1937	Total	Abated during 1937	Not abated at end of 1937
Choked drains	18	182	200	194	6
Defective drains	23	240	263	235	28
" traps	4	71	75	73	2
" sinks	40	116	156	111	45
" and dirty w.c.'s	43	416	459	377	82
" flushing-cisterns	16	55	71	59	12
" roofs	53	140	193	140	53
" eaves-gutters & rainwater pipes	54	122	176	126	50
" ceilings	46	144	190	145	45
" walls	88	372	460	338	122
Damp walls	90	243	333	255	78
Dirty rooms	138	614	752	608	144
Defective floors	63	225	288	223	65
" firegrates	27	89	116	94	22
" coppers	19	47	66	50	16
" yard paving	3	121	124	98	26
" forecourt paving	38	10	48	47	1
Offensive accumulations	7	52	59	56	3
" animals	—	8	8	7	1
Miscellaneous	237	900	1137	897	240
TOTALS	1007	4167	5174	4133	1041

VISITS AND INSPECTIONS, 1937.

Work in course of construction	....	....	....	1361
Infectious disease	....	....	....	178
Slaughterhouses	....	....	....	3725
Pig-killing on private premises	....	....	....	49
Butchers' shops	....	....	....	168
Markets	....	....	....	398
Bakehouses	....	....	....	83
Ice-cream shops	....	....	....	9
Cow-sheds, milkshops and dairies	....	....	....	343
Fishshops	....	....	....	545
Food shops	....	....	....	753
Workshops	....	....	....	410
Outworkers' premises	....	....	....	14
Common Lodging-house	....	....	....	13
Revisits	....	....	....	1908
Miscellaneous	....	....	....	1795
House-to-House inspections	....	....	....	372
Housing re-visits	....	....	....	747
Overcrowding Survey	....	....	....	3703
TOTAL	....	....	....	16574

DEFECTS IN OUTWORKERS' PREMISES.

Dirty Floors	....	....	....	—
Dirty Ceilings	....	....	....	2
Dirty Walls	....	....	....	2
Defective Roofs	....	....	....	—
„ Water-closets	....	....	....	2
„ Floors	....	....	....	—
„ Yard Paving	....	....	....	—
„ Firegrates	....	....	....	—
„ Walls	....	....	....	2
„ Drains	....	....	....	1
Other Defects	....	....	....	—
TOTAL	....	....	....	9

INSPECTION OF FACTORIES, WORKSHOPS AND WORKPLACES.

Including Inspections made by Sanitary Inspectors.

Premises. (1)	Number of		
	Inspections. (2)	Written Notices. (3)	Occupiers Prosecuted (4)
Factories (including Factory Laundries)	182	5	Nil.
Workshops (including Workshop Laundries)	203	17	Nil.
Workplaces (other than Outworkers' Premises)	25	—	Nil.
TOTAL	410	22	Nil.

DEFECTS FOUND IN FACTORIES, WORKSHOPS AND WORKPLACES.—Contd.

Particulars. (1)	Number of Defects.			Number of Offences in respect to which Prose- cutions were Instituted. (5)
	Found. (2)	Remedied. (3)	Referred to H.M. Inspector. (4)	
<i>Nuisances under the Public Health Acts :—*</i>				
Want of cleanliness	57	49	....	....
Want of ventilation	....	....	....	....
Overcrowding	....	....	....	....
Want of drainage of floors	....	....	....	....
Other nuisances	20	20	....	....
Sanitary accommodation { insufficient unsuitable or defective not separate for sexes	4	3	....	....
	36	30	....	....

<i>Offences under the Factory and Workshop Acts :—</i>				
Illegal occupation of underground bakehouse (s. 101)	....	....	....	....
Other offences	....	....	....	....
(Excluding offences relating to outwork and offences under the Sections mentioned in the Schedule to the Ministry of Health (Factories and Workshops Transfer of Powers) Order, 1921)				
TOTAL	117	102	....	....

* Including those specified in Sections 2, 3, 7, & 8 of the Factory and Workshop Act, 1901, as remediable under the Public Health Acts.

DISINFECTANTS.

Quantity given : Fluid	....	173 gals. 2 qts. 1 pt.
Powder	....	1 cwt. 2 qrs. 14 lbs.

DISINFECTION.

Cases of Cancer	....	....	....	27
„ Consumption	....	....	....	20
„ Infectious Disease	....	....	....	83
„ Smallpox	....	....	....	—
Verminous Rooms	....	....	....	472
School Rooms Disinfected	....	....	....	—
School Shawls	„	....	....	—
Library Books	„	....	....	31
Lots of Bedding	„	....	....	198
Lots of Bedding Destroyed	....	....	....	58
Animals Destroyed	....	....	....	4
Miscellaneous Articles Destroyed	....	....	....	33
Miscellaneous Articles Disinfected	....	....	....	—

DAIRIES, COWSHEDS AND MILKSHOPS.

Dairies and Milkshops	....	....	....	80
Cowsheds	....	....	....	19
Milk Purveyors from outside the Borough	....	....	....	48
TOTAL	....	....	....	147

MILK (SPECIAL DESIGNATIONS) ORDER, 1936.

Licences in force within the Borough.

Designation.	Producers.	Bottlers.	Dealers.
Tuberculin Tested	2	2	11
Accredited	10	1	5

“Accredited” producers from outside the Borough who are retailing within the Borough—5.

Designation.	Pasteurisers.	Dealers.
Pasteurised	2	6

Inspections	343
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DAIRIES, COWSHEDS AND MILKSHOPS—Contd.

NUISANCES FOUND—

Dairies requiring limewashing	59
Cowsheds requiring limewashing	....	....	38
Dirty yards	....	....	3
Defective paving	....	....	13
Offensive accumulations	....	....	2
Defective ceiling plaster	....	....	3
Unsuitable and dirty utensils	....	....	1
Milk and containers uncovered	....	....	3
Defective floors	....	....
Defective vent shafts	....	....	1
Dirty conditions	....	....	11
Insufficient water supply	....	....	—
Choked drains	....	....	—
Defective water-closets	....	....	—
Defective drains	....	....	2
Miscellaneous	....	....	11
TOTAL	....	....	<u>147</u>

SLAUGHTERHOUSES.

Registered	....	....	....	....	7
Licensed	....	....	....	....	12
TOTAL	....	....	....	....	<u>19</u>

Number of Inspections 3725

NUISANCES FOUND—

Requiring limewashing	....	....	....	14
Want of cleanliness	....	....	....	—
Insanitary condition of pens and yards	....	....	....	1
Offensive accumulations	....	....	....	8
Choked drains	....	....	....	2
Other defects	....	....	....	5
TOTAL	....	....	....	<u>30</u>

COMMON LODGING HOUSES.

On Register	....	....	....	....	1
Number of persons for whom accommodation is provided :—Adults, 109 ; Children 8.					
Inspections	....	....	....	....	13

RATS AND MICE (DESTRUCTION) ACT, 1919.

The following is a table showing the work carried out by your officer under the above Act during the year under review :—

Rats Caught	Complaints Received	Due to Defects of Drains or Sewers.	Due to Structural Defects.
4,652	320	38	11

BAKEHOUSES.

Factory Bakehouses	....	....	....	21
Workshop Bakehouses	....	....	....	9
Domestic Bakehouses	....	....	....	1
				—
TOTAL	....	....	....	31
				—
Number of Inspections	....	....	....	83

NUISANCES FOUND—

Limewashing overdue	....	....	....	31
Dirty yards	....	....	....	2
Ceilings requiring re-painting	....	....	....	—
Choked drains	....	....	....	—
Dirty W.C. pans	....	....	....	3
No separate accommodation for sexes	....	....	....	—
Accumulations of manure	....	....	....	—
Defective yard paving	....	....	....	—
Defective vent shafts	....	....	....	—
Want of cleanliness	....	....	....	3
Other defects	....	....	....	3
				—
TOTAL	....	....	....	42
				—

FOOD SUPPLY.

There are on the registers of the Department—

Butchers' Shops	....	....	....	88
Butchers' Stalls (in covered market)	....	....	....	2
Wholesale Meat Store	....	....	....	2
Fried Fish Shops	....	....	....	39
Ice Cream Shops	....	....	....	145
Cooked Meat Shops	....	....	....	57

and these premises are regularly inspected by your officers.

MEAT AND FOOD DESTROYED.

			Tons	Cwts.	Qrs.	lbs.
Carcases of Beef and offal	....	....	16	2	2	4
Portions	....	....	1	1	0	26
Carcases of Veal and Offal	....	....		3	3	10
Portions	....	....			2	16
Carcases of Pig and offal	....	....	1	9	0	3
Portions	....	....		4	2	26
Carcases of Mutton and offal	....	....		2	2	15½
Portions	....	....			2	20
Heads	....	....	2	5	2	17½
Lungs	....	....	1	7	0	27½
Livers	....	....		15	3	19
Plucks	....	....		15	2	19
Offal	....	....	1	7	0	27½
Hearts	....	....			1	15
Kidneys	....	....		1	1	16½
Udders	....	....		1	1	17
Legs	....	....			2	20
4 Turkeys	....	....			2	8
3 Chicken	....	....				—
22 Rabbits	....	....				—
Chilled beef	....	....		14	1	10
Chilled beef suet and trimmings	....	....			3	4
Plate corned beef	....	....			2	7
Tin of jellied beef	....	....				6
Tin of tongue	....	....				6
Sole	....	....			1	0
Herrings	....	....				18
Wet fillet	....	....				16
Codling	....	....				19
Haddock	....	....				15½
Cured fillet	....	....				26½
Skate	....	....				9
Plaice	....	....				11
Grey Sole	....	....				16½
Dabs	....	....				12
Lemon Sole	....	....				5
Whiting	....	....				4
Bloaters	....	....				4
5 pairs of Kippers	....	....				—
TOTAL	....	....	26	18	3	21

PUBLIC HEALTH (MEAT) REGULATIONS, 1924.

The following table shows the number of carcasses inspected during the year, together with the approximate average per week.

	Beasts	Calves	Pigs	Sheep	Total.
Total inspected....	1169	1873	5136	5614	13,792
Approximate average per week.	22	36	99	108	265

CLASSIFICATION OF THE DISEASES FOUND IN THE UNSOUND FOOD.

					Tons.	Cwts.	Qrs.	lbs.
Abscesses ....	....	....	....	....		11	0	4 $\frac{1}{2}$
Actinomycosis ....	....	....	....	....		1	0	14 $\frac{1}{2}$
Angioma ....	....	....	....	....		1	1	6
Arthritis ....	....	....	....	....		1	3	5
Blackleg ....	....	....	....	....		3	0	21
Black Spot (moulds) ....	....	....	....	....		5	3	18
Blood Aspiration ....	....	....	....	....		5	1	15 $\frac{1}{2}$
Bone Taint ....	....	....	....	....		1	0	26
Bruising ....	....	....	....	....		9	2	16
Carsinoma ....	....	....	....	....			1	23
Cirrhosis ....	....	....	....	....		2	1	15 $\frac{1}{2}$
Coccidiosis (12 rabbits) ....	....	....	....	....				—
Cystercercus Tenuicollis ....	....	....	....	....				18
Decomposition ....	....	....	....	....		1	3	1
Degeneration ....	....	....	....	....		1	1	20
Distomum Hepaticum ....	....	....	....	....		2	0	25
Echinococcus Veterinorum ....	....	....	....	....				19
Emaciation ....	....	....	....	....		12	1	4
Fatty Infiltration ....	....	....	....	....		1	1	8
Inflammation ....	....	....	....	....		14	3	19
Jaundice ....	....	....	....	....		1	0	15
Johnes Disease ....	....	....	....	....			3	26
Mastitis ....	....	....	....	....			2	9
Melanosis ....	....	....	....	....			2	7 $\frac{1}{2}$
Moribund ....	....	....	....	....		4	1	1
Necrosis ....	....	....	....	....		1	3	14
Nephritis ....	....	....	....	....			3	18
Oedema ....	....	....	....	....	2	4	2	3
Pericarditis ....	....	....	....	....		8	2	7 $\frac{1}{2}$
Peritonitis ....	....	....	....	....		3	3	4 $\frac{1}{2}$
Pleurisy ....	....	....	....	....		3	2	7 $\frac{1}{2}$
Pneumonia ....	....	....	....	....		19	0	24 $\frac{1}{2}$
Pyæmia ....	....	....	....	....			2	10
Sarcoma ....	....	....	....	....			1	12
Strongylus Filaria ....	....	....	....	....				8
Strongylus Rufescens ....	....	....	....	....				4 $\frac{1}{2}$
Swine Erysipelas ....	....	....	....	....			3	14
Tuberculosis ....	....	....	....	....	18	2	3	1 $\frac{1}{2}$
Unsoundness ....	....	....	....	....		6	1	0 $\frac{1}{2}$
Urticaria ....	....	....	....	....				20
TOTAL ....	....	....	....	....	26	18	3	21

DISINFECTION OF VEHICLES, ETC., AT THE
CATTLE MARKET.

Month.	No. Disinfected.		Total Fees Received.	Expenditure.
	Vehicles	Crates	£ s. d.	£ s. d.
January	181	—	4 10 6	2 9 0
February	152	—	3 16 0	2 6 0
March	168	—	4 4 0	3 1 0
April	154	6	3 18 0	2 3 0
May	140	27	3 14 6	2 8 0
June	92	23	2 9 10	1 13 0
July	121	30	3 5 6	2 1 0
August	138	34	3 14 8	2 1 0
September	161	23	4 4 4	2 6 0
October	189	36	5 0 6	2 6 0
November	223	37	5 17 8	2 14 0
December	121	3	3 1 0	1 19 0
TOTALS	1840	219	47 16 6	27 7 0

**TABLE SHOWING THE RESULTS OF THE BACTERIOLOGICAL
EXAMINATION OF MILK SAMPLES.**

No. of Sam- ple.	For Pasteurised Milk only.		Result of Bacteriological Examination.				
	Phos- phatase Test.	Organ- isms per C.M.L.	T.B.	B. Coli per 1 100 c.c.	Methyl- ene Blue Test	Sedi- ment per Half- pint.	Other Organisms.
1.	—	—	—	+	6½ hrs.	—	—
2.	—	—	—	—	6½ hrs.	—	—
3.	—	—	—	—	4 hrs.	—	—
4.	—	—	—	—	7 hrs.	—	—
5.	—	—	—	—	7+ hrs.	—	—
6.	—	—	—	—	7 hrs.	—	—
7.	—	—	—	—	7+ hrs.	—	—
8.	—	—	—	+	5 hrs.	—	—
9.	—	—	—	+	5 hrs.	—	—
10.	—	—	—	+	5 hrs.	—	—
11.	—	—	—	+	5 hrs.	—	—
12.	—	—	—	+	4 hrs.	—	—
13.	—	—	—	—	7+ hrs.	—	—
14.	—	—	—	—	7+ hrs.	—	—
15.	—	—	—	—	7+ hrs.	—	—
16.	—	—	—	—	7+ hrs.	—	—
17.	—	—	—	—	7+ hrs.	—	—
18.	Satis- factory.	3,400	—	—	—	—	—
19.	—	—	—	—	7 hrs.	—	—
20.	—	—	—	—	6½ hrs.	—	—
21.	—	—	—	—	7+ hrs.	—	Some evidence of slight mas- titis infection.
22.	—	—	—	—	7 hrs.	—	do.
23.	—	—	—	—	7+ hrs.	—	do.
24.	—	—	—	—	7 hrs.	—	—
25.	—	—	—	—	4½ hrs.	—	Most of the or- ganisms present undoubtedly originated from the dairy utensils.
26.	Satis- factory.	35,000 (per M.L)	—	—	—	—	—
27.	—	—	—	—	7+ hrs.	—	—
28.	—	—	—	—	7+ hrs.	—	—
29.	—	—	—	+	7+ hrs.	—	—
30.	—	—	—	+	7+ hrs.	—	Evidence of slight mastitis infection.

OVERCROWDING.

THE WHOLE BOROUGH.

	Houses.	Families.	Persons.
Overcrowding on Primary Survey	149	168	1219
Relieved during 1936	6	6	47
Unrelieved, December 31st, 1936	143	162	1172
New cases added during 1937	16	18	122
Total cases—1937	159	180	1294
Cases relieved during 1937	109	128	892
Unrelieved, December 31st, 1937	50	52	402

CORPORATION HOUSING ESTATE ONLY (included above.)

	Houses.	Families.	Persons.
Overcrowded on Primary Survey	29	29	269
Overcrowded since Primary Survey	4	4	31
Total Overcrowding Cases	33	33	300
Relieved during 1937	27	27	252
Unrelieved, December 31st, 1937	6	6	48

HOUSING ACTS, 1935 and 1936.

OVERCROWDING.

Particulars of houses still overcrowded at the end of the year 1937.

Primary Survey.				Overcrowded since Primary Survey.			Review cases found overcrowded since Primary Survey.			Total cases not relieved at the end of the year.		
Ward.	Houses	Families.	Persons	Houses	Families	Persons	Houses	Families	Persons	Houses	Families	Persons
North	2	2	20	3	3	25	—	—	—	5	5	45
South	3	3	26	1	1	8	—	—	—	4	4	34
East	2	2	11	—	—	—	2	3	11	4	5	22
West	8	8	74	—	—	—	1	1	9	9	9	83
King's	6	6	48	2	2	14	2	3	12	10	11	74
Queen's	7	7	57	1	1	9	4	4	30	12	12	96
Corporation Estate	2	2	17	—	—	—	4	4	31	6	6	48
Totals	30	30	253	7	7	56	13	15	93	50	52	402

NEW CASES REPORTED DURING THE YEAR.

Ward.	Relieved.			Not Relieved.		
	Houses.	Families.	Persons.	Houses.	Families.	Persons.
North	2	2	15	2	2	15
South	—	—	—	—	—	—
East	1	2	6	1	2	6
West	4	4	31	—	—	—
King's	3	3	23	2	2	14
Queen's	2	3	16	—	—	—
Corporation Estate	4	4	31	4	4	31

HOUSING.

Number of new houses erected during the year :—

(a) Total (including numbers given separately under (b))	515
(b) With State assistance under the Housing Acts :—	
(i) By the Local Authority	3
(ii) By other bodies or persons	—

I. INSPECTION OF DWELLING-HOUSES DURING THE YEAR :—

(1) (a) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts)	1021
(b) Number of inspections made for the purpose	2825
(2) (a) Number of dwelling-houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925	372
(b) Number of inspections made for the purpose	1082
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	Nil
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation	836

II. REMEDY OF DEFECTS DURING THE YEAR WITHOUT SERVICE OF FORMAL NOTICES :—

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their officers	752
---	-----

III. ACTION UNDER STATUTORY POWERS DURING THE YEAR :—

A. Proceedings under Sections 9, 10 and 16 of the Housing Act, 1936 :	
(1) Number of dwelling-houses in respect of which notices were served requiring repairs	Nil
(2) Number of dwelling-houses which were rendered fit after service of formal notices :—	
(a) By owners	Nil
(b) By Local Authority in default of owners	Nil

B. Proceedings under Public Health Acts :

- | | | | | | |
|--|------|------|------|------|---|
| (1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied | .... | .... | .... | .... | 6 |
| (2) Number of dwelling-houses in which defects were remedied after service of formal notices :— | | | | | |
| (a) By owners | .... | .... | .... | .... | 4 |
| (b) By Local Authority in default of owners | .... |  |  |  | — |

C. Proceedings under Sections 11 and 13 of the Housing Act, 1936 :

- | | | | |
|---|------|------|---|
| (1) Number of dwelling-houses in respect of which Demolition Orders were made | .... | .... | — |
| (2) Number of dwelling-houses demolished in pursuance of Demolition Orders | .... | .... | — |

D. Proceedings under Section 12 of the Housing Act, 1936 :

- | | | | | |
|---|------|------|------|------|
| (1) Number of separate tenements or underground rooms in respect of which Closing Orders were made | .... | .... | .... | — |
| (2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit | .... | .... | .... | .... |

IV. HOUSING ACT, 1936—PART IV—OVERCROWDING :—

- | | | | | | | |
|----|-------|--|------|------|------|-----|
| A. | (i) | Number of dwellings overcrowded at the end of the year | .... | .... | .... | 50 |
| | (ii) | Number of families dwelling therein | .... | .... |  | 52 |
| | (iii) | Number of persons dwelling therein | .... | .... |  | 402 |
| B. | | Number of new cases of overcrowding reported during the year | .... | .... | .... | 16 |
| C. | (i) | Number of cases of overcrowding relieved during the year | .... | .... | .... | 109 |
| | (ii) | Number of persons concerned in such cases | .... |  |  | 892 |
| D. | | Particulars of any cases in which dwelling-houses have again become overcrowded after the Local Authority have taken steps for the abatement of overcrowding | .... |  |  |  |

BOROUGH OF SWINDON.

EDUCATION COMMITTEE.

ANNUAL REPORT

OF THE

School Medical Officer

(DUNSTAN BREWER, M.R.C.S., L.R.C.P., D.P.H.)

For the Year 1937.

BOROUGH OF SWINDON EDUCATION COMMITTEE.

- * CHAIRMAN Alderman R. G. CRIPPS.
* VICE-CHAIRMAN Councillor J. BELCHER.

MEMBERS.

THE MAYOR (Alderman Major H. E. N. NIBLETT,
O.B.E., D.C.M., J.P.)

- | | |
|-------------------------------|-------------------------------|
| Alderman T. MANNING | * Alderman W. SEATON |
| Alderman L. J. NEWMAN | Councillor F. T. HOBBS |
| † Mrs. Councillor S. ANDREWS | * Councillor C. S. MACPHERSON |
| * Councillor J. L. CALDERWOOD | * Councillor W. R. ROBINS |
| * Councillor G. H. SELMAN | * Mrs. Councillor M. GEORGE |
| Councillor F. L. TONGE | Councillor A. E. HARDING |
| * Mrs. P. M. DARLING | * Mr. P. KING |
| Mr. J. HASKINS | * Mr. T. MEDCALF |
| Mr. F. W. HAWKSWORTH | * Miss M. E. SLADE |
| Mr. H. WHITING | |

Director of Education—Mr. STANLEY HIRST, B.Sc.

* *Members of the Medical Inspection Sub-Committee.*

† *Chairman of the Medical Inspection Sub-Committee.*

STAFF.

School Medical Officer—DUNSTAN BREWER, M.R.C.S., L.R.C.P.,
D.P.H.

Assistant School Medical Officers—

D. S. CLARK, M.B., Ch.B., D.P.H., D.P.M.,

(commenced 15-8-37)

VIOLET REDMAN KING, M.B., Ch.B.

V. R. WALKER, B.Sc. M.B., Ch.B., D.P.H.,

(resigned 7-6-37)

Ophthalmic Surgeon.

OLIVER B. PRATT, M.A., M.B., B.Ch., (Oxon.) D.O., M.R.C.S.,
L.R.C.P.

Specialist Nose, Throat and Ear Diseases.

F. COURTENAY MASON, B.A., Lond. M.S., M.B., B.S., F.R.C.S.(Eng.)

Orthopaedic Surgeon.

M. F. FORRESTER BROWN, M.D. (Lond.) M.S.

Dental Surgeons—W. KENYON BERRIE, L.D.S., R.F.P.S.G.

KENNETH W. MASSEY, L.D.S. (Liverpool).

ERNEST H. HARTLEY, L.D.S. (Liverpool).

Head Clerk—S. MANSFIELD DEE.

Senior Clerk School Medical Service—JOHN W. DAY.

Clinical Clerks and Dental Attendant—Miss G. L. NORRIS,
Miss E. M. KEY, and Miss N. JONES.

HEALTH VISITORS AND SCHOOL NURSES.

Miss I. D. SAMPSON.

3 years Certificate of Hospital Training.
Certificate for Tuberculosis (Royal Chest Hospital, London).
Queen's Nurse.
Certificate of Central Midwives Board.
State Registered Nurse.

Miss E. M. PILCHER.

3 years Certificate of Hospital Training.
School Nurse's and Health Visitor's and Tuberculosis Certificate.
Certificate of the Royal Sanitary Institute.
State Registered Nurse.

Miss A. HAWKINS.

4 years Certificate of Hospital Training.
Certificate of Central Midwives Board.
Health Visitor's Certificate of the Royal Sanitary Institute
State Registered Nurse.

Miss O. MARKER.

4 years Certificate of Hospital Training.
Certificate of Central Midwives Board.
Health Visitor's Certificate of the Royal Sanitary Institute.
State Registered Nurse.

Mrs. K. M. D. FRANCIS.

3 years Certificate of Hospital Training.
Certificate of Central Midwives Board.
Health Visitor's Certificate of the Royal Sanitary Institute.
State Registered Nurse.

Miss C. E. MIDDLETON.

4 years Certificate of Hospital Training.
Certificate of Central Midwives Board.
Health Visitor's Certificate of the Royal Sanitary Institute.
State Registered Nurse.

SCHOOL NURSE.

Miss A. M. HOARE.

2 years Certificate of Hospital Training.
Certificate of Central Midwives Board.
Certificate of the Royal Sanitary Institute.
State Registered Nurse.

BOROUGH OF SWINDON.
EDUCATION COMMITTEE.

Area	....	....	....	....	....	.... 6,021 acres
Number of Elementary Schools	....	....	....	....	....	16
Number of School Departments	....	....	....	....	....	33
Recognised Accommodation	....	....	....	....	....	12,055
Number of Children on Register	....	....	....	....	....	8,459
Average Attendance	....	....	....	....	....	7,504

Number of Secondary Schools	3
-----------------------------	------	------	------	------	------	---

Number of Scholars on Roll :—

The College, Secondary School	....	....	....	292
Euclid Street Secondary School	....	....	....	257
The Commonweal Secondary School	....	....	....	323

*To the Chairman and Members of the Education Committee of
the Borough of Swindon.*

LADIES AND GENTLEMEN,

I have pleasure in presenting the report upon the Medical Inspection and Treatment of School Children in the Borough for the year 1937.

The resignation of Dr. Walker and the interval of ten weeks between his leaving and the coming of his successor, Dr. Clark, caused much interference with the work of the school medical department. This loss of time could not be made good in the course of the year and accounts for the drop in the numbers of children medically inspected. We were able to keep up with the treatment, except for the eye work which fell behind and could not be picked up before the end of the year. In March, 1938, the Committee appointed a temporary assistant to Mr. Pratt to work off our waiting list of refraction cases, so that by the time this report is published our arrears will have been discharged. Dr. Walker was a skilled retinoscopist and materially lightened the work of our ophthalmologist.

Had it not been for Dr. Walker's resignation the school work in 1937 would have been particularly satisfactory, for the year was almost free from infectious diseases and consequently there was a drop in those defects which may be left by the infections. Ringworm, which at one time was a great nuisance in Swindon is now practically abolished, and impetigo, another trouble of school work, has dropped in incidence. This last was somewhat unexpected, because during most of last year *staphylococcus aureus*, which is the commonest cause of impetigo, was a dominating parasite in the district. The absence of keratitis and corneal opacities is a favourable point to be noted. This disease of the transparent part of the eye is caused by gonorrhoeal ophthalmia of the newborn, congenital syphilis, tuberculosis and nutritional deficiency, mainly of vitamin A. The absence of eye manifestations of these diseased states is evidence of the lowness of the diseases themselves. It is eight years since we have had any gonorrhoeal ophthalmia in a Swindon child. The incidence of congenital syphilis has fallen markedly. The nutrition of the people is now so much better than it was that vitamin A deficiency is quite rare. Infantile tuberculosis, though it is still with us, has become a problem of minor importance so far as incidence is concerned.

The drop in middle ear disease, tonsillitis and deafness is an expectation from the low incidence of scarlet fever and measles, the commonest causes of these conditions. The figures recorded

or throat conditions and enlarged glands must, however, be read with caution, for a change in the inspectorate makes much greater difference in the figures than actual variation in the conditions themselves. On the whole there is a steady decline of enlarged tonsils, adenoids, enlarged glands and chronic nasal catarrhs, due of a combination of favourable causes, the chief of which are improvement in nutrition and improved management of the acute infections.

Thyroid disease in children is now absent from the Borough of Swindon. In former years goitre with its associated derangements of function was a characteristic of the town, but preventive measures have led to its abolition and now we see no new cases, though the physicians of the town see the remote effects in those who had goitre in former years.

There was a diminution of rheumatic diseases of the heart due to the lowness of child rheumatism. We cannot guarantee that this will continue, for there is reason to believe that the lowness of child rheumatism in most parts of Western England in recent years is due to the periodicity of the disease and that it will again become ascendant. We cannot claim, unfortunately, that the diminution of rheumatism is due to any active preventive measures on our part, so if we have done something to prevent it it has been done by accident and not by design.

The comparative freedom in Swindon of children with gross defects who for administrative purposes are called Physically Defectives, is gratifying. But except for those afflicted with some of the nervous diseases and hereditary deficiencies we should be completely free from defectives, for all other physical defects are theoretically preventable. There was no new Swindon-born blind child last year, but we had to add to our list a newcomer to the Town who was blinded elsewhere.

There has been a noticeable rise in nutrition of children, but this rise could be brisker, for we are a long way from an optimum diet for all children.

The school dental department, now that we have three full-time dentists, is capable of covering the whole field so that the ideal that every child should leave school with a mouth dentally fit is no longer a dream, but an aim which is attainable.

During 1937, diphtheria was almost absent from Swindon, as also were measles and rubella. There was, however, a high prevalence of mumps and a moderate prevalence of whooping cough. The latter disease is more liable to kill than to cripple, though it

is often the starting point of asthma and deformities of the chest and spine. Mumps produces more matters of medical interest than of social importance except that it is one cause of total deafness. This is fortunately rare and there has been no case of deafness produced by the present epidemic. There was a widespread epidemic of mild influenza in January, but beyond temporary absence from school it produced no interference with the school children. An unfavourable feature is that recently there has been a rise in child tuberculosis. This matter is discussed in the report of the Medical Officer of Health.

There are some defects in school children which are constant, *i.e.*, they do not vary from place to place, or from year to year. The two most obvious of these are defective sight due to errors of refraction, and mental deficiency. Most of these defects are due to physiological variation and therefore will not alter in incidence until evolution brings about a change in the specific characters of man. Not all errors of refraction and not all varieties of mental defection are so caused. Some are the result of diseases of the eye and of the brain respectively, and these in course of time we may prevent.

The condition of the children's heads has now reached a state of constancy and any further improvement must await the discovery of new methods of management. I have dealt with this matter elsewhere.

EPILOGUE.

My active participation in preventive medicine is drawing towards its close and as I am one of the few remaining school medical officers still on the active list who were in at the start in 1908, I propose, in accordance with a promise made some years ago, to write an obituary notice of the generation of school medical officers which passes with me.

Over thirty years have gone by since Parliament passed the Education (Administrative Provisions) Act of 1907 which brought school medicine into being as a national function. The actual provision is contained in a single clause in this Act, in which it appears amongst the various odds and ends which make up a Provisions Act ; ⁽¹⁾ it received scant discussion in Parliament and excited little interest outside, save amongst those few who saw in it the beginning of a new social order which, in course of time, would profoundly modify the generations of mankind. Its lowly birth had the advantage of enabling us to get to work without undue fuss and though there were not lacking the usual advisors to tell us what was to be done, it was left fairly free to develop along its own lines and to grow by experience and experiment. Not being sensational and affecting directly only children, who have no say in their own governance, school medicine created little controversial heat and few offers of help, for it held small promise of personal reward to anybody who took part in it and appealed only to those who looked upon school medicine as a stepping stone to something more promising and to some who, imbued with the urge of inquiry and an earnest appreciation of the possibilities of physiology, had inherited the spirit of Darwin and the early biologists which imposed the duty upon all in a position to do so, to prosecute biology for the furtherance of man's advancement. So from the start we had two classes of physicians engaged in school medicine, those who entered it for what they could get out of it, those who entered it for what they could put into it. The former have had no influence upon the history of school medicine so what follows refers mainly to the work of a small body of pioneers. It would be invidious to mention by name any of these who are still in active practice, but there are three men, who though they are fortunately still with us, have retired,

(1) Education (Administrative Provisions) Act, 1907. The clause is Sub-section (b) of Sub-section 1 of Section 13, which is as follows :—

“ The duty to provide for the medical inspection of children immediately before, or at the time of, or as soon as possible after, their admission to a public elementary school, and on such other occasions as the Board of Education direct, and the power to make such arrangements as may be sanctioned by the Board of Education for attending to the health and physical condition of the children educated in public elementary schools.”

so to whose work we can pay tribute without advertisement, who played major parts in bringing school medicine to its present position. These three are George Newman ⁽²⁾, Ralph Crowley ⁽³⁾, and George Auden ⁽⁴⁾. But to the biography of school medicine can be added the names of many men and women who with precious little gain to themselves and less recognition by their colleagues have given to mankind the greatest benefit ever derived from medical science.

The differences between the children of to-day and those of thirty years ago may be briefly catalogued as follows :—

The children of to-day are significantly taller, heavier and of better physique. They are cleaner, better clothed and better fed and also they are better educated. The serious diseases of child life which caused much fatality and still more permanent ill-health and early senility have been reduced enormously. The so-called minor ailments, such as adenoids, nasal discharge, respiratory catarrhs, rickets, external eye diseases and ear and throat diseases have all been reduced in incidence and in severity, and some almost to extinction.

The chief reason for these differences is that in former years the beginnings of ill-health were allowed to progress unchecked, whereas to-day they are either prevented or remedied as soon as they appear. The whole progress of social welfare during the past thirty years has been favourable for the physical development of children, but constant vigilance is required to prevent recession. The work of the school medical department has certainly shifted from doing to watching and being prepared to do if necessary, but the watching is essential and must not be curtailed. We are apt to think that a trouble which has yielded to management has been exterminated and the management can cease. This is not so, for the essential causes of all human disabilities are always present and ever will be present and though we have considerable power to prevent them from producing their issues, they are always at hand to strike if our vigilance is relaxed.

Much remains to be done. Presuming that we pursue our policy, natural development will automatically improve the results so far obtained. We may assume that school dentistry, that at first did little more than relieve children suffering from toothache,

(2) Sir George Newman. First Medical Officer to the Board of Education and the Ministry of Health.

(3) Ralph H. Crowley. Formerly Senior Medical Officer to the Board of Education.

(4) George Auden. Formerly School Medical Officer to the City of Birmingham Education Committee.

will develop into the salvation of children's teeth and put a stop to the foul mouths which are so common in the community and lead to serious diseases in adult life. And similarly from all the functions we have started, an expansion producing general improvement is to be expected. Even so, this leaves much which we have not attempted to tackle seriously, partly from lack of energy, more from lack of knowledge, mostly from lack of imagination to lead us to gather knowledge in fields which our fathers had not explored.

The present position of school medicine as it operates in the Borough of Swindon may be summarised as follows:—

Our general scheme of medical inspection remains to-day very much as it was when the work started thirty years ago. Almost the same formulae are used and actually the same cards. This would suggest that during thirty years there has been no real progress, but merely amplification. Matters are not, however, so bad as this. It is true that the standard medical inspection remains unaltered, but a good deal has been added to it and we should not to-day consider that a child had been properly inspected if nothing further had been done than to fill up the required schedule. Yet we still pay too much attention to minor matters which have been standardised and too little to those of far greater consequence, but of which we have at present but hazy conceptions. Child psychology is practically new since medical inspection started and though our knowledge of it is fragmentary and mixed up with much error, there is no excuse for our neglecting it, or doing what we are always inclined to do—delay taking action ourselves until others have shown us the road. We make more fuss over anatomical defects which we can see and measure than of defects of function which are not apparent without research and whose remedy produces no visible signs. Anatomical changes, readily appreciated by the senses, are not really disease but the results of disease. Frequently they are produced by the body in its effort to overcome difficulties, and their treatment, though it might improve appearance, may be detrimental in the realm of function.

From time to time the whole province of school medicine should be reviewed, for there is no social function which is so apt to degenerate into routine and lag behind its potential. The biologist deals with life, a dynamic force which is ever changing and is so sensitive to environment that profound alterations may be produced by agents which are not expected to affect it.

The advent of the motor car has given us a new "peril." Every year about 7,000 persons are killed and 250,000 injured on the roads by this new convenience and menace. Surely this

holocaust must reduce the expectation of life and the car be counted an environment unfavourable to survival? Not at all! The car has been a great saver of life and actually the deaths and injuries it has caused, serious as these are, are trivial compared with the deaths and injuries it has prevented. For the car drove out infantile diarrhoea which in the last century killed one-tenth of the human race and crippled as many more.

At the present moment a social event which on the surface had no material bearing upon medical inspection has made our system of inspection of children in secondary schools almost useless, for this was designed to give special attention to the difficulties of the age period between puberty and adolescence. In past years most of the children first inspected in the secondary schools had left the elementary school age and puberty behind them. The re-arrangement of education by which children enter the secondary schools between the ages of eleven and twelve has caused the first inspection, designed for children of 14 to 16 years of age, to be given to younger children for whom it is quite unsuitable and a perfunctory examination given at that age when the most thorough of all inspections is required. This must be remedied.

The various clinics call for adjustment from time to time. The thyroid clinic which in past years was most important, became unnecessary and was abandoned. In its place we have instituted a clinic for dealing with children whose physical or mental conditions produce problems of great complexity, requiring much time and patient inquiry for solution. From time to time special difficulties arise calling for special efforts. In the past ringworm was such a problem. It would be madness to continue the special machinery for combatting ringworm, necessary when the disease was rife, now that it is in abeyance. An epidemic of scarlet fever or of measles may call for a temporary special clinic to deal with the ear, eye or throat complication which may be its sequel and every year a special effort has to be made to cover outbreaks of poliomyelitis which visit us with monotonous regularity between "Trip" and Michaelmas.

Man is not the sum of his component parts, but an ever changing event produced by the interaction of numerous functions, most of which act both in unison and opposition. Health depends upon a delicate adjustment of forces all of which are constantly shifting, inter-acting to fit time and place and circumstance. What is healthy at one time may be unhealthy at another. Sleepiness at bedtime is a sign of health, in the morning it is a sign of ill-health. The stimulus of emotion produces a series of changes in the body chemistry which in health succeed each other in definite

order ; should this rhythm be disturbed, bodily distress results. The organs of the body in health work at the minimum rate which will cover the work they are required to do at the time being. This is constantly changing ; it is never the same in two consecutive minutes. The heart, for instance, whose function in the body economy is to circulate the blood through the organs, to supply individual cells with oxygen for tissue respiration, beats with the minimum force and frequency requisite for this purpose. Its frequency must vary with the work of the moment. On exertion the rate rises, for exertion increases tissue respiration. Its reserve power is great though not unlimited and is called up automatically if the whole body is healthy, so that in health we are unconscious of what our hearts are doing. The organs will only react healthily if they are exercised to the full, the more work they are called upon to do within the limits of their physiological capacity the easier they will do it, the longer they will last and the slower are they to deteriorate. This explains the value of physical exercises in the promotion of health. But it must be all in ; the games and physical jerks are but part of the process, the exercises must cover all functions. We have heard so much of physical fitness and exercises recently that it is time to consider the campaign in all its physiological bearings for what can do good, can also do harm and it is easier to gather the harm than the good. Exertion to the limit of physiological capacity of all functions promotes health and defeats degeneration, if it attempts to exceed the capacity it may stimulate a spurt, but this is followed by deterioration and rapid failure. Without full nutrition and rest exercises do more harm than good. We must remember that in rearing a healthy race we also rear a hungry race and expansion of playing fields calls for synchronous extension of dinner tables. If our progeny grows to be as vigorous as we hope it may, we must expect its food bill to be doubled and the call for the other amenities of physical comfort to be increased in equal proportion. An efficient citizen is expensive to rear and maintain, but his value is out of all proportion to his cost. The aim of school medicine is the rearing of citizens to their full capacity. This is expensive, but the outlay pays high interest.

In rearing children to give the best of which they are capable, compromise may be required between opposing interests. One-sided views may in the end be detrimental. The treatment of chronic disablement may be good for the disablement and bad for the citizen. Most of our difficulties come within this field. A physically defective child—for instance one with a paralysed limb—requires special education for he must gain something to increase his value in the world's market in compensation for his disability. We give him an education toned down to his disability, what he wants is training toned up to what he has got to compensate him

for what he has not. You cannot expect a man with one leg to do the work of those with two. But the world expects it or something in place of it and if he cannot give it, he falls. Yet he may be a more valuable citizen if he receives stimulation of the power he has instead of mitigation of what he lacks. We are quite prepared to give him charity, but seldom to give him justice. We have children with damaged hearts, crippled limbs and deficient senses and many more with minor drawbacks who possess capacities which might be intensively developed, but in general we are so sensitive of their disablements that all our efforts are directed to vain attempts to improve their drawbacks. In treating the deficiency we too often sacrifice the citizen and convert a damaged life into a useless one. The discovery of a heart murmur, a wheeze in the chest, albumin in the urine, or even a flattening of the arch of the foot is often made an excuse for wrecking the life of a child. Done indeed in all charity in a sincere but mistaken belief that nursing his sickness will restore him to health and allow him to fight his way in the world. But the expense is not counted. The actual cost in £ s. d. is of no consequence, but the waste of time and the fixation of emotional interest on an inferior factor destroy the child's chance to make good in spite of his drawbacks. No defect should be ignored by us, but it is essential that the possessor should ignore it. This, of course, is quite easy if the defect is remediable, for a cured sickness can be speedily forgotten. But many defects cannot be remedied and attempts to obtain improvement sacrifice the chance of developing sound functions which can lead to the acceptance of the drawback as a nuisance perhaps, but not as an insuperable hindrance.

The physiological capacity of children, the outcome of their development and their future value cannot be gathered by a physical examination. Nor indeed can the present state of the child's health, though obvious late manifestations of diseases can be detected readily enough. There is much misunderstanding upon this subject and "medical examination" has become a fetish worshipped by the uninitiated, though physicians, the high priests of the cult, know how small is its value. Life is dynamic and its functions can be estimated only by repeated observations to detect secular changes. We can no more evaluate the health of an individual by a single examination than we can tell the rate at which a vehicle can travel from an instantaneous photograph. In both cases we can often presume what is likely to happen from the physical state of the machine. A glance at the Prime Minister affords sufficient evidence for the deduction that he will not die in childbirth or from cutting his teeth and a photograph of a car may be accepted by a court as a valid defence against a charge of driving at excessive speed. Further than this we cannot go, and we can go very little further in estimating the physiological

value of a child by any static examination. Yet by continued observation we can gain an insight into the forces which make up the individual and by studying his reactions to environments estimate his capacity to meet the stresses and strains he must encounter in the struggle for existence.

School medicine is the most difficult work in the whole province of medicine to do well, but it is also the more promising contribution that the medical profession can make to our social system. We have been at it for thirty years and made a fairly promising start, though it never has been done really well and at present cannot be, but those who struggled through its preliminary difficulties saw that in the future it could be done well.

We early realised that the school child gave us the only available field for studying man from the biological standpoint, for the school medical officer sees the whole of the population during certain age periods without any selection. We saw early that there is no line of demarkation between the fit and the unfit, the healthy and the unhealthy, the weak and the strong, but a regular curve of incidence humped temporarily by reactions to acute stresses and more permanently by some gross departures from normal. We found that the differences between children were largely within the ambit of physiological variation, but by adjusting the environment to suit individual deviation we could elevate the physiological value of all so that the general level of health was exalted. We were deceived, as man always is deceived, by the spectacular results of individual treatments, for we all like to see results and are impatient of the long delays of unspectacular benefits. This is specially so when a brilliant finish can be accounted to a specific action. The surgeon who receives a patient desperately ill with appendicitis and effects a cure by an operation is highly and rightly pleased with himself. The school medical officer who after years of monotonous labour finds but a slight rise in the general health of children is apt to be disconcerted, especially as he knows not what part he has played in the improvement or indeed, whether his work has counted at all amongst the numerous other agencies of improvement without his province. The past has been devoted mainly to raise the unfit to a passable level of fitness, the great aim of school medicine is to develop the fit to the full extent of their capacity.

To help us in the rearing of children obviously diseased we have enlisted the services of a great number of medical specialists. No local scheme would be thought efficient which did not include, on its staff specialists in nose and throat diseases, in ophthalmology in orthopaedics and a host of other pathological states which affect some of our children. But in this welter of attention to pathology

we have neglected to rear the specialism of child physiology ; so though we have hundreds of specialists in children's diseases, we have few in children's health and these few are not counted as specialists unless they approach their function through pathology.

School medicine reached the most promising point in its development in 1935 when, at the Congress of the Royal Sanitary Institute at Bournemouth, the existing position and future developments of this departure of medicine were discussed with unusual liveliness. This frightened all but those who had worked to develop child physiology and led to a reaction. From this we are still suffering, for in the interval we have lost from active service many of our experienced officers who had brought the practice of child physiology to the level it had attained at the time of the Congress. The Bournemouth Conference offered an opportunity to a younger generation to start there and then to reform the practice of school medicine along the lines indicated by the evolution of biological, theory which we owe to the first generation of school medical officers, but the influence of the medical specialists predominated and a chance was lost to steer the nation over the danger it has to face from its declining man-power. The opportunity will come again, but there are grave doubts if we shall have the minds to meet it.

We need research in school medicine of a kind which is not popular with anybody ; research on a great scale spread over many years, for most of the problems to which we seek answers involve whole lives. How can we tell whether efforts to rear citizens in health have succeeded until those who have been submitted to the experiment have completed their natural course ? The great object of child welfare is to assure the future life of citizens. A particular object is to try to delay the onset of senility. The labouring classes age much more rapidly than the professional classes. We have presumed that this is due to the hardness of their labours, but there is no physiological warrant for this assumption whereas there are good grounds for believing that it is largely due to sub-optimum nurture during the years of their development. But this we cannot prove in less than one generation. We cannot force the pace and since the War we have been indecently impatient for immediate results.

We do little to promote health because so few people know what full health means as they never experience it, so most of our endeavours are directed to the negative phase of health, or absence of tangible disease. Fear of disease being one of the chief causes of it, the more we work in this negative sphere the worse we get. The reports of the Scottish Health Insurance Commission show that as disease becomes eliminated, sickness

increases and our records of medical inspection of school children show most valiant attempts to find out what is wrong with precious poor attention to what is right and can be developed.

The great majority of children we see to-day are apparently healthy and the most exhaustive inquiry fails to find any evidence of present disease ; but we know that their future is not secure and many of them will fail under the stresses before them. We have presumed that this is due to some undetected fault and try harder and harder and more and more elaborately to bring to light these hidden evils ; but we have done little to find out why the ordinary wear and tear of life affect individuals so differently, or why when we have dismissed a person as a "first class life" we cannot tell if he will die next week or live for a century. The most highly promising investigations are rarely pursued. Efficiency testing which had such a promising start from the late Colonel Flack ⁽⁵⁾ Professor Haldane ⁽⁶⁾ and Parlane Kinlock ⁽⁷⁾ has made no progress of recent years ; research into the development of the face which will explain so many of the defects of childhood has been suspended ; the study of physiological variations is confined to a few "cranks" and the study of the mind's evolution is tolerated only in the hope that it may lead to saving expense in managing defectives. We are energetic enough in rearing stock for profit, we have discovered how to rear rats of most surprising vitality ; but we are reluctant to apply the knowledge gained in these fields to improve our own stock. The sum of knowledge at our command to improve our children is great, but much of it is unutilised and dormant. It is the function of the school medical service to apply this knowledge and the first generation of school medical officers passes out in the hope that those who supplant it will have the vigour and determination to use to the full the knowledge of human biology at their disposal and to fight against vested interests and lethargy and the cramping influence of superstition and prescription.

(5) Lieut. Colonel Martin Flack, R.A.M.C. and eventually of the Medical Research Committee.

(6) J. S. Haldane. Late professor of physiology to the University of Cambridge. A fellow physiologist (of no particular merit) said that there was only one member of the school of Haldane and now he is dead the school is dead also ! Yet Haldane had one of the sharpest and imaginative brains of the century. Like that of Einstein, with whom Haldane had much in common, his philosophy was sneered at, because so few people have the intelligence to grasp his meaning.

(7) Parlane Kinlock. Late Chief Medical Officer to the Scottish Office. A somewhat erratic and ill-starred genius. His early death at the age of 47 robbed us of one of our most powerful leaders.

March 1938.

DUNSTAN BREWER,
School Medical Officer.

THE ORTHOPAEDIC SCHEME.

The orthopaedic scheme has continued on the same basis as before, the conduct of the Clinic being in the hands of the Children's Orthopaedic Clinic holding weekly remedial sessions and monthly surgeon's consultations in Gorse Hill Hospital Annexe. In addition to cases continued from the preceding year, 23 new cases attended, whose defects are summarised below :—

			<i>Infant Welfare Section.</i>	<i>Elementary Education Section.</i>	<i>Higher Education Section.</i>
Deformity of chest	....	....	—	1	—
Kyphosis	....	....	1	....	....
Postural defects	....	....	1	3	4
Defects of knee joint	....	....	....	2	....
Genu varum	....	....	1	....	....
Genu valgum	....	....	1	1	....
Flat foot	....	....	1	2	....
Deformities of feet	....	....	....	1	....
Deformities of toes	....	....	2	1	....
Defects arising from nervous disease	....	....	1	....	....
TOTALS	....	....	8	11	4

SUMMARY OF WORK OF CLINIC.

			<i>Infant Welfare Section.</i>	<i>Elementary Education Section.</i>	<i>Higher Education Section.</i>
Consultations with Surgeon	....		134	52	26
Attendances at Sister's weekly Clinic	....	....	293	69	39

In-patient orthopaedic treatment, manipulative or operative was provided under the scheme in the Children's Orthopaedic Hospital, Bath, for the following :—

<i>Nature of Defect and Treatment.</i>	<i>Hospital In-patient days.</i>
Flat foot (forcible manipulation)	17 (Elementary Education case)
Genu varum (bending under anaesthetic)	*91 (Maternity and Child Welfare case)

*Remaining in Hospital on 31st December, 1937.

March 1938.

D. S. CLARK,
Assist. School Medical Officer.

APPENDIX I.

REPORT OF THE SCHOOL DENTAL SURGEON.

To the Chairman and Members of the Swindon Education Committee.

LADIES AND GENTLEMEN,

I have pleasure in presenting the Annual Report on Dental Inspection and Treatment for the year 1937.

38 departments in the Elementary Schools were dentally inspected and it was found that 69.3% of the children required treatment. 6262 children were referred for treatment, 4,145 attended making 7.956 attendances.

ROUTINE INSPECTION.

9031 children were inspected in schools.
 6262 or 69.3% were recommended for treatment.
 4145 children attended the Clinic.
 2152 children were rendered dentally fit.
 7956 attendances were made.

ELEMENTARY SCHOOLS.

8654 appointments were made.
 7956 or 91.9% were kept.
 2836 teeth were extracted.
 1118 teeth were filled.
 11132 other operations were carried out.

The X-ray apparatus was used in many cases as a help in diagnosis, and 3 partial dentures were made.

In a few cases appliances for regulation purposes were made, but mostly extraction was done to relieve crowded conditions. The Dental Attendants were present at all the sessions, and their services are of great value. All children are seen in the elementary schools at the routine inspection.

SECONDARY SCHOOLS.

Dental Inspection and treatment were carried out for the pupils at the three Secondary Schools (The College, Euclid Street and The Commonweal).

769 pupils were examined.

455 or 59% were referred for treatment.

276 were treated at the Clinic.

673 attendances were made.

303 teeth were extracted, 242 being permanent teeth.

288 permanent teeth were filled.

96 other operations were carried out, also 36 scalings.

The analysis of Dental Inspection and treatment will be found in the Statistical Tables for Higher Education.

INFANT WELFARE.

164 cases attended from the Infant Welfare Centre, 44 being Ante-Natal cases, making 444 attendances. Emergency treatment was carried out in all the Ante-Natal cases and advice given for further treatment.

Nurse Hoare who during her service with the Corporation spent 14 years of that time in the Dental Clinic retired at the end of the year under the age limit. I should like to record our appreciation of the good service she has given to this department. She was the friend of all, and her long experience was invaluable in dealing with this special type of work.

On behalf of the dental staff I wish to thank all the medical staff, and teachers who helped us during the year in carrying on the work.

W. KENYON BERRIE, L.D.S., R.F.P.S.G.
School Dental Surgeon.

March, 1938.

APPENDIX II.

REPORT OF THE OPHTHALMIC SURGEON.

To the Chairman and Members of the Swindon Education Committee.

LADIES AND GENTLEMEN, .

In carrying on the work of the School Eye Clinics through 1937 I have had much valuable help, first from Dr. V. R. Walker and, after his retirement from the post of Assistant School Medical Officer, from his successor Dr. Clark. The work is necessarily of a routine nature for the most part but in all medical work one must be always on the alert for serious conditions presenting only trivial symptoms, and in ophthalmology this is no less true than in other branches of medicine and surgery. A few such cases occur every year in the Clinics.

I acknowledge with thanks the help I have received from the Nursing and Clerical Staffs and from Messrs. Leighton's who have supplied the spectacles prescribed.

OLIVER B. PRATT, M.A., M.B., M.R.C.S., L.R.C.P.
Ophthalmic Surgeon.

March 1938.

ELEMENTARY EDUCATION

Statistical Tables.

TABLE I.—Return of Medical Inspections.**A.—ROUTINE MEDICAL INSPECTIONS.**

Number of Code Group Inspections :

Entrants	....	....	....	....	711
Intermediates	687
Leavers	641
TOTAL	<u>2039</u>

Number of other Routine Inspections	Nil
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B.—OTHER INSPECTIONS.

Number of Special Inspections	3306
Number of Re-Inspections	4946
TOTAL	....	....	<u>8252</u>

TABLE I—C.

CHILDREN FOUND TO REQUIRE TREATMENT.

Number of individual children found at Routine Medical Inspection to require treatment (excluding Defects of Nutrition, Uncleanliness and Dental Disease)

GROUP.	For Defective Vision (excluding SQUINT.)	For All other Conditions Recorded in Table IIa.	Total No. of Children requiring treatment.
Entrants 	7	62	67
Second Age Group 	50	48	94
Third Age Group 	38	39	75
TOTAL (Prescribed Groups) 	95	149	236
OTHER ROUTINE INSPECTIONS 	—	—	—
GRAND TOTAL 	95	149	236

TABLE II.—A.—Return of Defects found by Medical Inspection in the
Year ended 31st December, 1937.

DEFECT OR DISEASE.	ROUTINE INSPECTIONS.		SPECIAL INSPECTIONS.	
	No. of Defects.		No. of Defects.	
	Requiring treatment.	Requiring to be kept under observation but not requiring treatment.	Requiring treatment.	Requiring to be kept under observation but not requiring treatment.
(1)	(2)	(3)	(4)	(5)
<i>Skin—</i>				
Ringworm :				
Scalp ....	....	....	4	....
Body ....	....	....	5	....
Scabies	2	1	14	....
Impetigo	1	....	49	....
Other Diseases (Non-Tuberculous)	2	2	845	....
<i>Eye—</i>				
Blepharitis	1	1	16	....
Conjunctivitis ....	....	....	17	....
Keratitis ....	....	....	....	....
Corneal Opacities ....	....	....	....	....
Defective Vision (exclud. Squint)	95	39	34	2
Squint	21	3	4	3
Other Conditions	5	1	148	....
<i>Ear—</i>				
Defective Hearing	4	4	19	2
Otitis Media	6	....	45	....
Other Ear Diseases	5	1	93	....
<i>Nose and Throat—</i>				
Chronic Tonsillitis only	15	12	56	1
Adenoids only	2	6	8	....
Chronic Tonsillitis and Adenoids	7	4	40	2
Other Conditions	45	21	147	9
Enlarged Cervical Glands (Non-Tuberculous)	1	1	192	3
Defective Speech ....	....	2	....	3

TABLE II. A.—(Continued)

DEFECT OR DISEASE.	ROUTINE INSPECTIONS		SPECIAL INSPECTIONS	
	No. of Defects.		No. of Defects.	
	Requiring treatment.	Requiring to be kept under observation but <i>not</i> requiring treatment.	Requiring treatment.	Requiring to be kept under observation but <i>not</i> requiring treatment.
(1)	(2)	(3)	(4)	(5)
<i>Heart and Circulation—</i>				
Heart Disease :				
Organic ....	...	3	1	...
Functional ....	...	17	...	7
Anaemia	3	3	...	...
<i>Lungs—</i>				
Bronchitis	1	3	2	...
Other Non-Tuberculous Diseases	1	4	18	10
<i>Tuberculosis—</i>				
Pulmonary :				
Definite ....	...	...	...	1
Suspected ....	...	...	...	...
Non-Pulmonary :				
Glands ....	...	...	...	...
Bones and Joints ....	...	...	...	2
Skin ....	...	...	...	...
Other Forms ....	...	...	...	...
<i>Nervous System—</i>				
Epilepsy ....	...	...	1	...
Chorea ....	...	...	2	...
Other Conditions	3	10	27	9
<i>Deformities—</i>				
Rickets ....	...	...	...	...
Spinal Curvature	6	13	...	2
Other Forms	15	44	27	4
Other Defects and Diseases	10	50	650	62
TOTALS	251	245	2464	122

TABLE II. B.

Classification of the Nutrition of Children Inspected during the Year in
the Routine Age Groups.

Age Groups	Number of Children Examin- ed.	A (Ex- cellent)		B (Normal)		C (Slightly Sub Normal)		D (Bad)	
		No.	%	No.	%	No.	%	No.	%
Entrants	711	153	21·5	497	69·9	58	8·2	3	·4
Second Age-Group	687	171	24·9	459	66·8	55	8	2	·3
Third Age-Group	641	171	26·7	434	67·7	35	5·5	1	·1
Other Routine Inspection	—	—	—	—	—	—	—	—	—
TOTAL	2039	495	24·3	1390	68·1	148	7·3	6	·3

TABLE III.**Return of all Exceptional Children in the Area.****BLIND CHILDREN.**

A blind child is a child who is too blind to be able to read the ordinary school books used by children, and can only be appropriately taught in a school for blind children.

At Certified Schools for the Blind.	At Public Elementary Schools	At Other Institutions	At no School or Institution	Total
3	3

PARTIALLY SIGHTED CHILDREN.

Children who, though they cannot read ordinary school books or cannot read them without injury to their eyesight, have such power of vision that they can appropriately be taught in a school for the partially sighted

At Certified Schools for the Blind	At Certified Schools for the Partially Sighted	At Public Elemen- tary Schools	At other Institu- tions.	At no School or Institution	Total
....	3	1	3*	7

* Three infants. Final result may be better than "Partially Sighted."

DEAF CHILDREN

Children who are too deaf to be taught in a class of hearing children in an elementary school, and can only be appropriately taught in a school for the deaf.

At Certified Schools for the Deaf.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total
2	1	....	....	3

TABLE III.—(Continued).

PARTIALLY DEAF CHILDREN.

Children who can appropriately be taught in a school for the partially deaf.

At Certified Schools for the Deaf.	At Certified Schools for the Partially Deaf.	At Public Elementary Schools.	At Other Institutions	At no School or Institution	Total
....

MENTALLY DEFECTIVE CHILDREN.**FEEBLE-MINDED CHILDREN**

Mentally Defective children are children who, not being imbecile and not being merely dull or backward, are incapable by reason of mental defect of receiving proper benefit from the instruction in the ordinary Public Elementary Schools but are not incapable by reason of that defect of receiving benefit from instruction in Special Schools for mentally defective children.

At Certified Schools for Mentally Defective Children	At Public Elemen- tary Schools.	At other Institu- tions.	At no School or Institution	Total
16	8	....	4	28

EPILEPTIC CHILDREN.**CHILDREN SUFFERING FROM SEVERE EPILEPSY**

Children who are epileptic within the meaning of the Act, *i.e.*, children who, not being idiots or imbeciles, are unfit by reason of severe epilepsy to attend the ordinary Public Elementary Schools.

At Certified Special Schools.	At Public Elementary Schools.	At other Institutions	At no School or Institution.	Total
....	1	1

TABLE III.—(Continued).**PHYSICALLY DEFECTIVE CHILDREN.**

Physically Defective children are children who, by reason of physical defect, are incapable of receiving proper benefit from the instruction in the ordinary Public Elementary Schools, but are not incapable by reason of that defect of receiving benefit from instruction in Special Schools for physically defective children.

A. TUBERCULOUS CHILDREN

In this category are only cases diagnosed as tuberculous and requiring treatment for tuberculosis at a sanatorium, a dispensary, or elsewhere. Children suffering from crippling due to tuberculosis which is regarded as being no longer in need of treatment are recorded as crippled children, provided that the degree of crippling is such as to interfere materially with a child's normal mode of life. All other cases of tuberculosis regarded as being no longer in need of treatment are recorded as delicate children.

I. CHILDREN SUFFERING FROM PULMONARY TUBERCULOSIS.

(Including pleura and intra-thoracic glands)

At Certified Special Schools.	At Public Elemen- tary Schools †	At other Institu- tions	At no School or Institution	Total
....	(a) 1	(b) 2	1	4

(a) Had tuberculous pleurisy but has now recovered.

(b) One case had X-ray evidence of quiescent pulmonary tuberculosis.

* See note below.

II.—CHILDREN SUFFERING FROM NON-PULMONARY TUBERCULOSIS.

At Certified Special Schools	At Public Elemen- tary Schools †	At other Institution	At no School or Institution	Total
5	14	1	4	24

† Tuberculous children who are, or may be, a source of infection to others are promptly excluded from Public Elementary Schools.

B. DELICATE CHILDREN.

Children (except those included in other groups) whose general health renders it desirable that they should be specially selected for admission to an Open Air School.

At Certified Special Schools.	At Public Elemen- tary Schools	At other Institu- tions.	At no School or Institution	Total
....	60	....	18	78

* These children are still retained on the T.B. Register. Neither has any signs of active disease and both attend school on the advice of the Tuberculosis Officer and the School Medical Officer.

TABLE III.—(Continued).**C. CRIPPLED CHILDREN**

Children (other than those diagnosed as tuberculous and in need of treatment for that disease) who are suffering from a degree of crippling sufficiently severe to interfere materially with a child's normal mode of life, *i.e.*, children who generally speaking are unable to take part, in any complete sense, in physical exercises or games or such activities of the School curriculum as gardening or forms of handwork usually engaged in by other children.

At Certified Special Schools.	At Public Elemen- tary Schools	At other Institu- tions	At no School or Institution	Total
1	21	1	6	29

D. CHILDREN WITH HEART DISEASE.

Children whose defect is so severe as to necessitate the provision of educational facilities other than those of the Public Elementary School.

At Certified Special Schools.	At Public Elemen- tary Schools.	At other Institu- tions	At no School or Institution	Total
....	6	....	1	7

CHILDREN SUFFERING FROM MULTIPLE DEFECTS.

Children suffering from any combination of the following types of defect:—

Blindness (not partial Blindness).
Deafness (not partial Deafness).
Mental Defect (Feeble-Minded).
Severe Epilepsy
Active Tuberculosis.
Crippling.
Heart Disease.

Combination of Defect.	At Certified Special Schools.	At Public Elemty. Schools.	At other Institu- tions.	At no schl. or Insti- tution.	TOTAL.
Feeble-Minded & Crippled	2	—	—	—	2
Blind & Feeble-Minded ...	—	—	—	1	1

**Statement of the number of Children notified during the Year ended
31st December, 1937, by the Local Education Authority to the
Local Mental Deficiency Authority.**

Total Number of Children notified — 12.

ANALYSIS OF THE ABOVE TOTAL.

DIAGNOSIS.	Boys.	Girls.
1. (i) Children incapable of receiving benefit or further benefit from instruction in a Special School :		
(a) Idiots 	1	....
(b) Imbeciles	2	2
(c) Others 	2	....
(ii) Children unable to be instructed in a Special School without detriment to the interests of other children :		
(a) Moral defectives .... ....	....	....
(b) Others 	4	....
2. Feeble-minded children notified on leaving a Special School on or before attaining the age of 16 	1	....
3. Feeble-minded children notified under Article 3, <i>i.e.</i> , "special circumstances" cases	....	....
4. Children who in addition to being mentally defective were blind or deaf .... ....	....	....
GRAND TOTAL 	10	2

**TABLE IV.—Return of Defects Treated during the Year ended
31st December, 1937**

TREATMENT TABLE.

**Group I.—Minor Ailments (excluding Uncleanliness, for which see
Group VI).**

DISEASE OR DEFECT.	Number of Defects treated, or under treatment during year.		
	Under the Authority's Scheme.	Otherwise	Total.
<i>Skin—</i>			
Ringworm—Scalp { X-ray treatment	....	....	....
{ Other	4	....	4
Ringworm—Body	5	....	5
Scabies	14	....	14
Impetigo	49	....	49
Other Skin Disease	730	....	730
Minor Eye Defects (External and other, but excluding cases falling in Group II).	173	....	173
Minor Ear Defects, &c.	235	....	235
Miscellaneous (e.g. Minor injuries, bruises, sores, chilblains, etc.)	1513	9	1522
TOTAL	2723	9	2732

TABLE IV.—(Continued).**Group II.—Defective Vision and Squint (excluding Minor Eye Defects treated as Minor Ailments—Group I).**

DEFECT OR DISEASE	No. of Defects dealt with		
	Under the Authority's Scheme.	Otherwise	Total.
Errors of Refraction (including Squint)	490	....	490
Other Defect or Disease of the Eyes (excluding those recorded in Group I).	85	....	85
TOTAL	575	....	575

Total number of children for whom spectacles were prescribed :

(a) Under the Authority's Scheme 299

(b) Otherwise —

Total number of children who obtained or received spectacles :

(a) Under the Authority's Scheme 260

(b) Otherwise

Group III.—Treatment of Defects of Nose and Throat**NUMBER OF DEFECTS.**

Received Operative Treatment.												Received other forms of Treat- ment.	Total number Treated.
Under the Author- ity's Scheme, in Clinic or Hospital for :				By Private Prac- titioner or Hospital apart from the Authority's Scheme				Total					
(1)				(2)				(3)				(4)	(5)
(i)	(ii)	(iii)	(iv)	(i)	(ii)	(iii)	(iv)	(i)	(ii)	(iii)	(iv)		
2	2	64	6	....	....	....	....	2	2	64	6	89	163

(i) Tonsils only. (ii) Adenoids only. (iii) Tonsils and Adenoids.

(iv) Other defects of the nose and throat.

TABLE IV.—Continued.
GROUP IV. — ORTHOPAEDIC AND POSTURAL DEFECTS.

	UNDER THE AUTHORITY'S SCHEME				OTHERWISE		Total Number treated.
	Residential treatment with education	Residential treatment without education	Non-residen- tial treatment at an orthopaedic clinic.	Residential treatment with education	Residential treatment without education	Non-residen- tial treatment at an orthopaedic clinic.	
Number of children treated.	1	....	70	....	....	....	70

TABLE IV.—(Continued)

Group V.—Dental Defects.

(1) Number of Children who were :—

(i) Inspected by the Dentist :

	Age	{	3	134	}	Total 9031
			4	410		
			5	785		
			6	853		
			7	882		
			8	799		
Routine Age Groups		{	9	889		
			10	920		
			11	967		
			12	910		
			13	925		
			14	533		
			15	24		
	Specials
	GRAND TOTAL			<u>9031</u>

(ii) Found to require treatment 6262

(iii) Actually treated 4145

(2) Half days devoted to : { Inspection 95 } Total 1121
Treatment 1026 }

(3) Attendances made by children for treatment 7956

(4) Fillings { Permanent teeth 1072 } Total 1118
Temporary teeth 46 }(5) Extractions { Permanent teeth 1124 } Total 3960
Temporary teeth 2836 }

(6) Administrations of general anæsthetics for extractions 396

(7) Other operations { Permanent teeth 1617 } Total 11132
Temporary teeth 9515 }

TABLE IV—(Continued).

Group IV.—Uncleanliness and Verminous Conditions.

(i)	Average number of visits per school made during the year by the School Nurses	....	....	7
(ii)	Total number of examinations of children in the Schools by School Nurses	....	....	26254
(iii)	Number of individual children found unclean	....		567
(iv)	Number of children cleansed under arrangements made by the Local Education Authority	....		4
(v)	Number of cases in which legal proceedings were taken :			
	(a) Under the Education Act, 1921	....	....	Nil
	(b) Under School Attendance Byelaws	....		Nil

TABLE IV.—RETURN SHOWING DEFECTS TREATED AT MINOR AILMENT CLINIC. YEAR ENDED 31st DECEMBER, 1937.

DISEASE OR DEFECT	No. of Defects treated under Authority's Scheme.			No. of Defects cured.	No. of Defects remaining under treatment.	No. of consultations.	No. of attendances at Clinic
	From previous year	New	Total				
<i>Contagious Skin Diseases</i>							
Impetigo	2	47	49	47	2	82	263
Scabies	1	13	14	13	1	45	83
<i>Non-Contagious Skin :</i>							
Dermatitis ....	....	6	6	6	....	16	41
Eczema ....	....	6	6	4	2	23	31
Seborrhoea ....	....	1	1	1	....	1	1
Abscesses	1	1	2	2	....	1	2
Boils ....	....	40	40	39	1	143	179
Warts	4	70	74	73	1	71	378
Herpes ....	....	26	26	25	1	45	57
Acne ....	....	....	....	....	....	....	....
Urticaria ....	....	12	12	12	....	18	28
Psoriasis ....	....	—	....	....	....	....	....
Alopecia	1	2	3	3	....	6	6
Intertrigo ....	....	1	1	1	....	1	1
Other diseases	6	380	386	380	6	619	1470
<i>Ear, Nose and Throat Diseases :</i>							
Adenoids ....	....	3	3	3	....	5	8
Glands	1	48	49	49	....	96	109
Rhinitis ....	....	1	1	1	....	4	4
Tonsillitis ....	....	23	23	23	....	45	51
Earache ....	....	25	25	25	....	51	68
Laryngitis ....	....	1	1	1	....	2	2
Pharyngitis ....	....	....	....	....	....	....	....
Other Diseases	....	76	76	76	....	156	171
<i>Wounds and Injuries :</i>							
Injuries ....	....	85	85	85	....	161	251
Grazes ....	....	123	123	123	....	168	429
Bites and Stings	....	42	42	42	....	47	122
Burns, Scalds, Cuts,&c.	1	129	130	130	....	215	573
Septic Sores ....	....	238	238	238	....	177	891
Bruises and Sprains	....	136	136	136	....	246	376
Others ....	....	44	44	44	....	72	113
<i>External Eye Diseases :</i>							
Foreign Body ....	....	9	9	9	....	12	12
Stye ....	....	30	30	30	....	66	85
Blepharitis	1	13	14	13	1	30	77
Conjunctivitis ....	....	17	17	17	....	74	99
Corneal Ulcer ....	....	....	....	....	....	....	....
Corneal Opacity ....	....	....	....	....	....	....	....
Pink Eye ....	....	19	19	19	....	92	98
Other Diseases	1	83	84	83	1	185	219

TABLE V.—(Continued).

DISEASE OR DEFECT	No. of Defects treated under Authority's Scheme.			No. of Defects cured.	No. of Defects remaining under treatment.	No. of consultations.	No. of attendances at Clinic
	From previous year	New	Total				
<i>Infectious Diseases :</i>							
Chicken Pox	....	37	37	37	....	39	59
Whooping Cough	....	10	10	10	....	16	16
Diphtheria ....	....	4	4	4	....	4	4
Mumps ....	....	95	95	95	....	113	122
Scarlet Fever	....	3	3	3	....	3	3
Measles ....	....	4	4	4	....	4	4
<i>General :</i>							
Ill-health, &c.	4	281	285	284	1	541	593
TOTALS	23	2180	2203	2186	17	3691	7095

Total number of children treated—1462.

TABLE VII. TREATMENT OF RINGWORM.

Number of cases			Number of consultations with Doctor	Number of attendances made by children at Clinic	Number of cases cured	Number of cases still under treatment		Number for which no report is available
Old	New	Total				Attending School	Not attending School	
3	6	9	34	63	8	1	....	....

TABLE IX. ELECTRICAL TREATMENT.

Number of cases				Number of attendances for treatment.	Disease or Defect	
Boys		GIRLS			Infantile Paralysis	Naevus
Old	New	Old	New	TOTAL		
1	1	....	2	1	1

TABLE X. SUMMARY OF SCHOOL ACCIDENTS WHICH OCCURRED DURING THE YEAR 1937.
(ELEMENTARY SCHOOL CHILDREN)

Number of cases		Total number of attendances made by children at Clinic.	Number of cases where treatment was completed at Clinic.	Still under Treatment	Number of X-ray exposures	Number of cases referred to Hospital or Private Practitioner for further treatment	Number of cases resulting in permanent disability.
Serious	Minor						
....	285	285	273	3	16	9	....

NOTE.—Cases of simple fracture not resulting in permanent disability and cuts requiring stitching, however extensive, so long as no permanent injury but a good scar resulted, are included as minor injuries.

HIGHER EDUCATION

Statistical Tables.

HIGHER EDUCATION.

**TABLE I.—NUMBER OF CHILDREN ATTENDING THE SWINDON
SECONDARY SCHOOLS INSPECTED DURING THE YEAR
ENDED 31st DECEMBER, 1937.**

A.—ROUTINE MEDICAL INSPECTIONS.

	AGE GROUPS.										TOTAL
	10	11	12	13	14	15	16	17	18	19	
Boys	1	62	97	86	82	83	61	8	7	1	488
Girls	1	36	66	79	60	74	47	5	6	....	374
TOTALS	2	98	163	165	142	157	108	13	13	1	862

B.—OTHER INSPECTIONS.

Number of Special Inspections ....	....	....	351
Number of Re-inspections ....	....	....	324
			675

TABLE II.—A.—RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION IN THE YEAR ENDED 31st DECEMBER, 1937.

DEFECT OR DISEASE.	ROUTINE INSPECTIONS		SPECIAL INSPECTIONS	
	Number of Defects		Number of Defects	
	Re-quiring treat-ment.	Requir- ing to be kept under obser- vation but not requiring treatm't	Re-quiring treat-ment.	Requir- ing to be kept under obser- vation but not requiring treatm't
<i>Nutrition :</i>				
Poor	15	2	....	....
<i>Skin :</i>				
Alopæcia	....	2	....	....
Acne	2	2	....	....
Impetigo	....	....	1	....
Other Diseases, Acne, etc., (non-Tuberculous)	5	5	22	....
<i>Eye :</i>				
Conjunctivitis	....	....	1	....
Blepharitis	2	1	1	....
Defective vision	66	1	6	....
Squint	....	1	....	....
Other conditions	4	1	8	....
<i>Ear :</i>				
Defective Hearing	1	1	....	....
Otitis Media	4	....	3	....
Other Ear Diseases	3	3	4	....
<i>Nose and Throat :</i>				
Adenoids	1	1	....	....
Enlarged Tonsils only	2	3	4	....
Enlarged Tonsils & Adenoids	....	....	....	....
Other conditions	12	7	17	....
<i>Glands :</i>				
Enlarged, Cervical and Sub-max : (non-Tuberculous)	....	1	4	....
Enlarged Thyroid	2	1	3	....
<i>Tuberculosis :</i>				
Pulmonary	....	....	....	1
<i>Heart and Circulation :</i>				
Anaemia	....	2	....	....
Heart Disease—Organic	....	1	....	....
Functional	....	7	....	....
<i>Lungs :</i>				
Bronchitis	....	1	....	....
<i>Nervous System :</i>				
Asthma	....	6	1	1
Overstrain	2	12	5	....
Other conditions	1	6	7	....
<i>Deformities :</i>				
Spinal Curvature	4	9	....	....
Posture	18	13	1	....
Flat Foot	9	15	4	....
Other Forms	7	11	3	2
<i>Other Defects or Diseases :</i>	5	26	109	2
TOTALS	165	141	204	6

TABLE III. SUMMARY OF ACCIDENTS WHICH OCCURRED TO SECONDARY SCHOOL CHILDREN DURING THE YEAR ENDED 31st DECEMBER, 1937.

Number of Cases.		Total number of attendances made by children at Clinic.	Number of cases where treatment was completed at Clinic.	Number of X-ray exposures	Number of cases referred to Hospital or Private Practitioner for further treatment	Number of cases resulting in permanent disability.
Serious	Minor					
....	60	168	54	6	6	....

NOTE.—Cases of simple fracture not resulting in permanent disability and cuts requiring stitching, however extensive, so long as no permanent injury but a good scar resulted, are included as minor injuries.

**TABLE IV.—RETURN OF DEFECTS TREATED DURING THE YEAR
ENDED 31st DECEMBER, 1937.**

TREATMENT TABLE.

Group I.—Minor Ailments (excluding Uncleanliness)

DISEASE OR DEFECT.	Number of Defects treated or under treatment during the year.		
	Under the Authority's Scheme	Other- wise	Total
<i>Skin—</i>			
Impetigo	1	....	1
Other Skin Disease	22	....	22
Minor Eye Defects	10	....	10
Minor Ear Defects	7	....	7
Miscellaneous (e.g., minor injuries, bruises, sores, etc.)	109	....	109
TOTAL	149	....	149

TABLE IV.—(Continued).

Group II.—Defective Vision and Squint (excluding Minor Eye Defects treated as Minor Ailments—Group I).

DEFECT OR DISEASE	No. of Defects dealt with		
	Under the Authority's Scheme.	Otherwise	Total.
Errors of Refraction (including Squint)	121	....	121
Other Defect or Disease of the Eyes (excluding those recorded in Group I).	15	....	15
TOTAL	136	....	136

Total number of children for whom spectacles were prescribed :

(a) Under the Authority's Scheme 66

(b) Otherwise —

Total number of children who obtained or received spectacles :

(a) Under the Authority's Scheme 63

(b) Otherwise 2

Group III.—Treatment of Defects of Nose and Throat

NUMBER OF DEFECTS.

Received Operative Treatment.												Received other forms of Treat- ment.	Total number Treated.
Under the Author- ity's Scheme, in Clinic or Hospital for :				By Private Prac- titioner or Hospital apart from the Authority's Scheme				Total					
(1)				(2)				(3)				(4)	(5)
(i)	(ii)	(iii)	(iv)	(i)	(ii)	(iii)	(iv)	(i)	(ii)	(iii)	(iv)		
....	4	1	....	....	....	....	....	....	4	1	11	16

(i) Tonsils only. (ii) Adenoids only. (iii) Tonsils and Adenoids.
(iv) Other defects of the nose and throat.

TABLE IV.—Continued.
GROUP IV. — ORTHOPAEDIC AND POSTURAL DEFECTS.

	UNDER THE AUTHORITY'S SCHEME				OTHERWISE		Total Number treated.
	Residential treatment with education	Residential treatment without education	Non-residen- tial treatment at an orthopaedic clinic.	Residential treatment with education	Residential treatment without education	Non-residen- tial treatment at an orthopaedic clinic.	
Number of children treated.	13	....	....	....	13

TABLE IV.—(Continued)

Group V.—Dental Defects.

(1) Number of Children who were :—

(i) Inspected by the Dentist :

	Age	{	11	10	}	Total 769
			12	109		
			13	139		
			14	136		
Routine Age Groups			15	163		
			16	128		
			17	65		
			18	17		
			19	2		

Specials	....	....	....	....	....
GRAND TOTAL				....	769

(ii) Found to require treatment 455

(iii) Actually treated 276

(2) Half days devoted to : { Inspection 7 } Total 97
Treatment 90

(3) Attendances made by children for treatment 673

(4) Fillings { Permanent teeth 288 } Total 288
Temporary teeth —(5) Extractions { Permanent teeth 242 } Total 303
Temporary teeth 61

(6) Administrations of general anæsthetics for extractions 82

(7) Other operations { Permanent teeth 96 } Total 96
Temporary teeth —

TABLE IV.—Continued.

GROUP V. CONDITION OF TEETH OF SCHOLARS DENTALLY
INSPECTED AT THE SECONDARY SCHOOLS DURING THE
YEAR ENDED 31st DECEMBER, 1937.

THE COLLEGE SECONDARY SCHOOL.

BOYS

Year of Birth	Number of carious teeth							Number free from caries.	Total number exam- ined
	1	2	3	4	5	6	8		
1918	1	....	....	....	....	....	....	....	1
1919	1	1	2	....	....	....	....	....	4
1920	2	2	....	1	....	....	1	10	16
1921	1	....	....	....	....	....	....	8	9
1922	9	4	1	....	....	....	....	17	31
1923	11	6	1	....	1	....	....	10	29
1924	6	4	1	....	....	1	....	7	19
1925	5	4	4	1	....	....	....	11	25
1926	....	1	....	....	....	....	....	1	2
TOTAL	36	22	9	2	1	1	1	64	136

GIRLS

Year of Birth	Number of carious teeth.							Number free from caries	Total number exam- ined
	1	2	3	4	5	6	12		
1919	4	....	....	....	....	....	....	3	7
1920	3	2	....	....	....	....	....	6	11
1921	....	2	1	1	1	....	....	4	9
1922	7	2	1	....	....	....	....	10	20
1923	6	3	....	....	....	1	....	13	23
1924	9	2	2	1	....	....	1	14	29
1925	7	3	....	1	1	....	....	4	16
TOTAL	36	14	4	3	2	1	1	54	115

EUCLID STREET SECONDARY SCHOOL.

BOYS

Year of Birth	Number of carious teeth							Number free from caries	Total number exam- ined
	1	2	3	4	5	7	8		
1920	2	1	....	1	....	....	....	11	15
1921	14	4	....	2	....	....	....	41	61
1922	4	6	3	2	1	....	....	29	45
1923	4	4	1	....	....	....	....	15	24
1924	6	2	1	1	2	1	....	19	32
1925	3	3	4	2	....	....	1	19	32
1926	....	....	2	....	....	....	....	3	5
TOTALS	33	20	11	8	3	1	1	137	214

TABLE IV (Continued.)

GROUP V. (Continued).

EUCLID STREET SECONDARY SCHOOL.

GIRLS.

Year of Birth	Number of carious teeth.								No. free from caries	Total No. examined.
	1	2	3	4	5	6	7	8		
1920	2	1	....	....	....	....	....	....	9	12
1921	2	4	1	1	....	....	....	1	20	29
1922	5	9	1	3	....	2	....	....	21	41
1923	9	1	....	....	....	....	....	....	15	25
1924	4	7	1	2	....	....	1	....	20	35
1925	7	1	1	2	1	....	....	....	20	32
1926	....	1	1	....	....	....	....	....	2	4
TOTAL	29	24	5	8	1	2	1	1	107	178

THE COMMONWEAL SECONDARY SCHOOL.

BOYS.

Year of Birth.	Number of carious teeth.							Number free from caries.	Total number examined
	1	2	3	4	5	6	7		
1918	....	1	....	....	....	....	....	....	1
1919	1	....	....	1	....	....	....	2	4
1920	4	1	....	....	....	....	....	4	9
1921	9	3	3	....	....	....	....	9	24
1922	7	5	2	3	1	....	1	9	28
1923	13	3	3	1	....	....	....	14	34
1924	6	3	2	2	1	....	....	10	24
1925	5	2	2	3	1	1	....	4	18
1926	1	....	....	....	....	....	....	....	1
TOTALS	46	18	12	10	3	1	1	52	143

GIRLS.

Year of Birth	Number of carious teeth.								Number free from caries	Total number examined
	1	2	3	4	5	6	8	9		
1919	1	....	....	....	....	....	....	....	1	2
1920	4	....	2	....	....	....	....	....	3	9
1921	11	3	1	1	....	....	....	....	9	25
1922	11	4	1	1	....	....	1	....	10	34
1923	7	1	4	....	....	....	....	1	7	20
1924	9	5	2	3	1	....	....	....	8	28
1925	3	2	....	2	....	....	....	....	4	11
1926	....	....	....	....	....	1	1	....	....	2
Totals	46	15	10	7	1	1	2	1	48	131

TABLE IV (Continued).
GROUP V. (Continued).
SUMMARY OF RESULTS OF DENTAL INSPECTION AT THE SECONDARY SCHOOLS, YEAR 1937.

Secondary School.	ENTRANTS		RE-INSPECTIONS		Total Number Inspected	Total Number referred for treatment	Number free from caries
	Number Inspected	Number referred for treatment	Number Inspected	Number referred for treatment			
The College	40	26	211	107	251	133	118
Euclid Street	64	43	180	105	244	148	96
The Commonweal	38	22	236	152	274	174	100
TOTALS	142	91	627	364	769	455	314

Percentage of Entrants requiring treatment 64%
Percentage of children Re-inspected requiring treatment 58%
Percentage of Total number of children inspected requiring treatment 59%

